FEBRUARY
1955

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See Page 2 for Conversion Details

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2716 Kc.	7013 Kc.	7121 Kc.	8320 Kc.
3482.5 Kc.	7020 Kc.	7125 Kc.	8488 Kc.
3503 Kc.	7021 Kc.	7126 Kc.	8500 Kc.
3509 Kc.	7022 Kc.	7130 Kc.	9125 Kc.
3511 Kc.	7023 Kc.	7134 Kc.	10 Mc.
3512 Kc.	7031 Kc.	7145 Kc.	10.511 Mc.
3515 Kc.	7032 Kc.	7156 Kc.	10.524 Mc.
3516 Kc.	7032.6 Kc.	7163 Kc.	10.530 Mc.
3528 Kc.	7048 Kc.	7174 Kc.	10.536 Mc.
3532 Kc.	7052 Kc.	7179 Kc.	10.544 Mc.
3539.3 Kc.	7062 Kc.	7202.3 Kc.	10.546 Mc.
3634 Kc.	7063 Kc.	8000 Kc.	10.563 Mc.
3640 Kc.	7064 Kc.	8017.5 Kc.	11 Mc.
3675 Kc.	7068 Kc.	8027 Kc.	12.803 Mc.
4285 Kc.	7072 Kc.	8028.5 Kc.	14.020 Mc.
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WI BROADCASTS

All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.

VK2WI: Sundays, 1100 hours EST, 7146 Kc. and 2000 hours EST 50 and 144 Mc. No frequency checks available from VK2WI. Intrastate working frequency, 7125 Kc.

VK3WI: Sundays, 1130 hours EST, simultaneously on 3573 and 7146 Kc., 51.016 and 146.25 Mc. Intrastate working frequency 7135 Kc. Individual frequency checks of Amateur Stations given when VK3WI is on the air.

VK4WI: Sundays, 0900 hours EST, simultaneously on 3560 and 14342 Kc. 3560 Kc. channel is used from 0915 hours to 1015 hours each Sunday for the W.I.A. Country hook-up. No frequency checks available.

VK5WI: Sundays, 1000 hours SAST, on 7146 Kc. Frequency checks are given by VK5MD and VK5WI by arrangements on all bands to 50 Mc.

VK6WI: Sundays, 0930 hours WAST, on 7146 Kc. No frequency checks available.

VK7WI: Sundays, at 1000 hours EST, on 7146 Kc and 146.5 Mc. No frequency checks are available.

AMATEUR RADIO

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Melbourne, C.1.

EDITORIAL

★

TELEVISION AND THE PROGRESSIVE AMATEUR

Exactly five years ago "Amateur Radio" published one of its first editorials concerning Television and discussed the necessity for members taking an interest in new techniques with regard to the prevention of harmonic radiation.

This raises the question of how many Amateurs do keep pace with modern electronic developments. Some, fortunately, due to their vocation, are of necessity required to give their attention to the progress of their particular science. Some, however, follow more mundane paths of life and the media of their hobby is only participated in during leisure hours.

At this juncture it is worth noting that progressive science does not wait for its friends and the Amateur must spend some of his time mastering new problems, studying new ideas, and experimenting with new pieces of equipment. The nearness of Television and its kindred t.v.i. offers a convenient starting place for this renaissance.

With new fields of endeavour and new methodology, the Amateur will find a world where he will regain some of the delights of discovery he experienced when he first started his career in the world of electronics.

The use of frequency modulation, applications of the cathode ray tube, time bases of various forms, beam antennae and a thousand or more Television developments can be applied with profit to Amateur Radio. A knowledge of principles will pay dividends when the matter of t.v.i. is under consideration.

The progressive Amateur will still be "on the air" when Television arrives, using its advantages and benefiting by its techniques, because he has kept abreast of his hobby.

FEDERAL EXECUTIVE.

THE CONTENTS

COMMAND RECEIVER ROUNDUP*

UNDENIABLY the most popular items of war surplus gear are the "Command Set" Transmitters and Receivers. Because of the tremendous interest they still have for many of our readers, last issue we published an article on the Transmitters. Now we take pleasure in presenting the Receivers.

The most commonly available Command Receivers are the BC453, covering 190-550 Kc.; the BC454, covering 3-6 Mc.; and the BC455, covering 6-9 Mc. They all use the same basic six-tube superheterodyne circuit employing a 12SK7 r.f. stage, a 12K8 mixer, two 12SK7s as i.f., a 12SR7 second detector and b.f.o., and a 12A6 audio amplifier, with the filaments of the 12.6 volt tubes wired in series-parallel for operation from 25 volts.

In the case of the 3 to 6 Mc. unit the i.f. is 1415 Kc., and in the higher frequency model the i.f. is 2830 Kc.

The receivers are quite sensitive and stable, but the two units that cover the Amateur 3.5 and 7 Mc. bands leave much to be desired from the selectivity standpoint. Nevertheless, they make excellent "first" or standby receivers. To improve the selectivity of these two units, the reader is referred to an article by K. B. Pounsett ("A.R.," June, 1953, p.2) on Double Conversion of Command Receivers.

The BC453, 190-550 Kc., receiver has proved to be an extremely useful gadget around many Amateur shacks. It uses an 85 Kc. i.f. amplifier, which is very selective. By tuning the main dial to 455 Kc., the standard intermediate frequency of most communications receivers, and using a wire connected to the antenna post of the BC453 with the other end wrapped loosely around the lead from the last i.f. transformer to the second detector in the communications receiver, the combination becomes an extremely selective "dual-conversion" receiver†.

Some Amateurs, however, just take the i.f. transformers from the BC453 to build a selective i.f. channel in less space‡.

MODIFYING THE RECEIVERS

To use the receivers in Amateur service entails adding a gain control, a beat-oscillator switch and a phone jack, and building a power supply. Also, as it is easier to obtain 12.6 volts than 25 volts, it is usually necessary to rewire the filaments in parallel for 12 volt operation. When this is done, the six volt equivalents of the original tubes may be substituted and the receivers then operated from a six-volt filament source.

The circuit and values of the components of the Command Receiver in its original form are shown in Fig. 1.

The logical place to mount the new gain control, phone jack, and beat-oscillator switch is on the front panel in the space occupied by the adapter box. Remove the screws holding the box in place. Unplug it and remove the aluminium box holding the socket into which the adapter plugged. Mark the wires that were connected to pins 1, 4, and 5. Remove the rest. Cover the hole in the panel with a flat piece of aluminium upon which is mounted a midget 25,000 ohm wire-wound potentiometer, flanked by a s.p.d.t. toggle switch and a small phone jack.

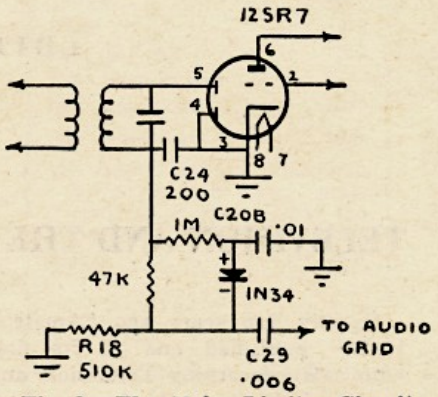

Fig. 2.—The Noise Limiter Circuit.

Ground the middle terminal of the potentiometer and one terminal of the switch to the ground lug of the phone jack. Connect the No. 1 wire to the left-hand terminal of the potentiometer (viewed from the back with terminals down), wire No. 5 to the switch, and wire No. 4 to the phone jack.

To rewire the filaments of tubes for parallel operation, ground one filament pin of each tube socket and connect the other filament pins of each socket together and to Pin 2 of the three-terminal plug at the rear of the receiver. Pins 2 and 7 are the filament terminals on all tubes, except the 12SR7, on which they are pins 7 and 8.

Connect power to the three-terminal plug thus: B— and one side of the filament circuit to pin 1; 12 volts a.c. to pin 2; and 200 to 250 volts d.c. at 50 Ma. to pin 3.

WARNING! Do not apply more than 250 volts to the receiver; otherwise there is danger of blowing some of the condensers in it.

Make a short sleeve, slotted on both ends, out of ¼" inside diameter copper tubing, and use it as a coupling between the splined tuning shaft and a piece of ¼" shafting to which a tuning knob may be attached. A spinner-type knob is very handy for this purpose. Fill the sleeve with some type of adhesive which dries hard, such as Duco cement, before fitting it snugly over the receiver tuning shaft. It will withstand rough usage without coming loose.

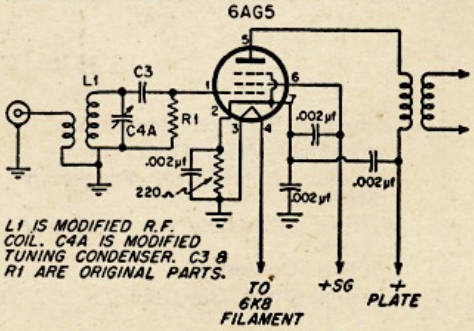

Fig. 3.—The New R.F. Stage.

Remove the bottom of r.f. stage grid resistor (R2 in Fig. 1) from the a.v.c. circuit, and connect it to ground, to permit this stage to run wide open for increased gain.

A word of caution is here in order. In any of the receivers, do not disturb the wiring between the 12K8 tube and the oscillator coil. In most sets these leads are fastened down with glyptal, and for a very good reason. Shifting these leads will greatly affect the oscillator frequency and stability. Hours of careful work can be ruined by movement of these leads.

A coaxial jack should be installed on the front panel in the place formerly occupied by the old antenna binding post. Merely drill a series of small holes around the circumference of a 5/8" diameter circle, and knock out the centre. Use self-tapping screws to secure the jack to the panel.

Replace the 12SK7 r.f. and i.f. tubes with 12SG7s, to give greater sensitivity and gain.

Use of the station receiver during the conversion of the 14 and 28 Mc. receivers is necessary, as it is a very simple matter to listen to the Command receiver's h.f. oscillator in the station receiver and check its frequency as we make changes. Substract 1415 from the h.f. oscillator frequency, and you will have the receiver's operating frequency.

To bandspread the 14 Mc. band, the h.f. oscillator will have limits of 15,415 and 15,915 Kc. For the 28 Mc. band, the limits will be 29,415 and 31,115 Kc.

BANDSPREADING

For the 14 and 28 Mc. bands, the 3-6 Mc. receiver was chosen because their i.f. frequency of 1,415 Kc. offers a good amount of image rejection without sacrificing too much selectivity.

INCREASING THE BANDSPREAD ON 3-6 Mc. RECEIVER

By removing five of the eight rotor plates on the tuning gang, bandspread can be considerably increased on the BC454 (3-6 Mc.) receiver. Additional padding condensers must be added across the r.f. and oscillator portions of the circuit; 33 pF. NPO ceramicons are satisfactory.

Signal to noise ratio can be improved by disconnecting the 620 ohm cathode resistor from the gain control line and grounding.

A good idea for a bandspread scale is to fit a white celluloid scale to the small tuning knob.

On the 7-7.15 Mc. band of the BC455 (6-9.1 Mc.) receiver, this dial will make approximately 1½ revolutions to cover the band. Calibrations are made on the

* Compiled from articles by Lt. Paul H. Lee, W4RXO, and Herb S. Brier, W9EGQ, "CQ," May, 1952, and February, 1954, respectively.
† "Lazy Man's Q5-er," Technical Topics, "QST," January, 1948, p.40.
‡ "New Simplified Q5-er," W6NRM/W9TCJ, "CQ," July, 1953, p.25; "Triple Conversion for the Communications Receiver," W6SAI, "QST," September, 1948, p.53.

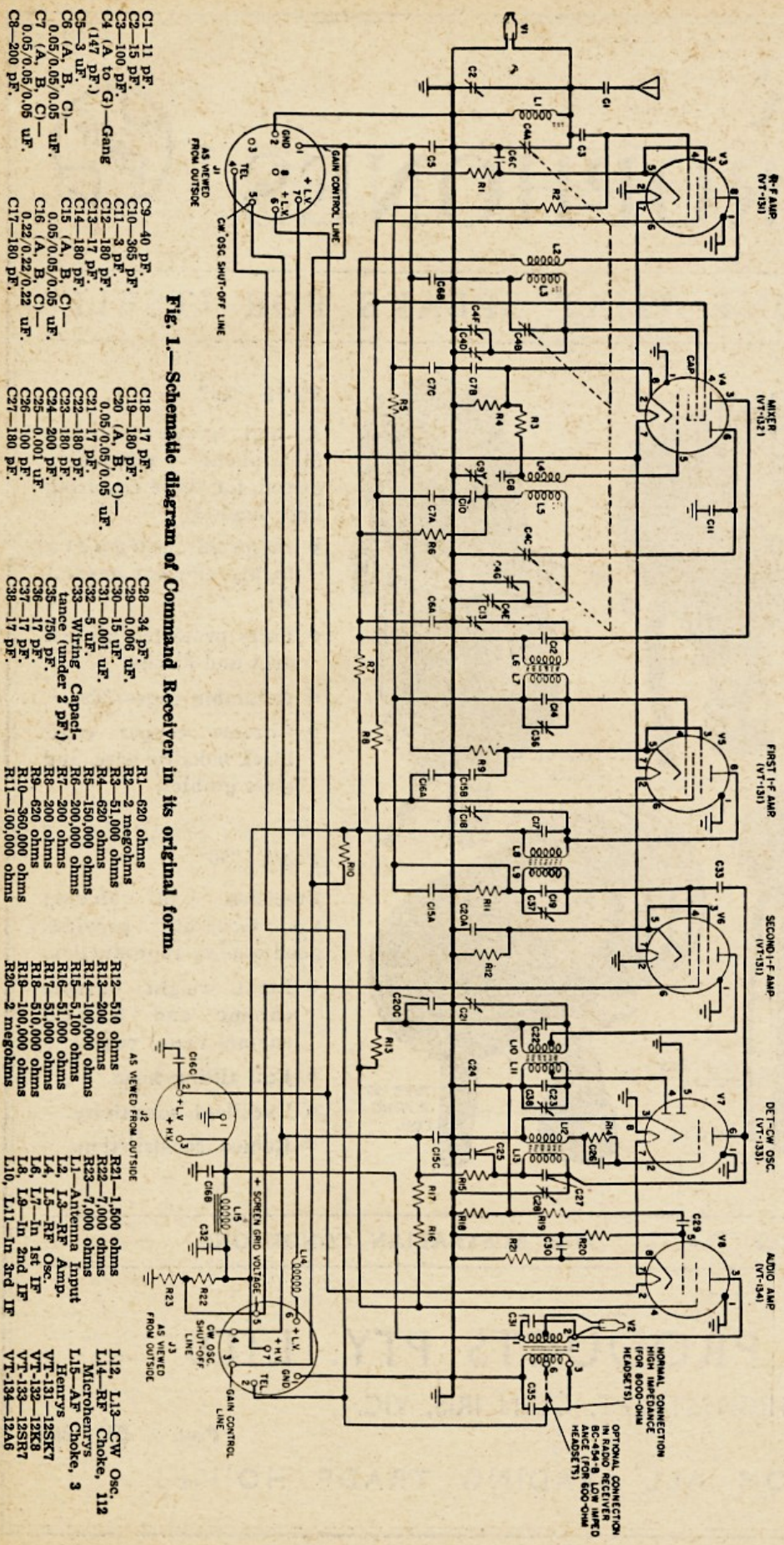

Fig. 1.—Schematic diagram of Command Receiver in its original form.

outside edge of the dial from 7-7.1 Mc. and then are continued on an inner circle from 7.1-7.15 Mc.

In operation, a glance at the main dial shows in which 100 Kc. segment the receiver is tuned and the auxiliary scale indicates the exact frequency.

To make the celluloid suitable for drawing the scales, rub the gloss off with fine glass paper.

14 Mc. RECEIVER CONVERSION

Let's start on the 14 Mc. receiver. We have already performed the basic modifications. Remove the top cover and the shield can over the variable condenser. The receiver may operate without these shields for rough frequency calibration. With a pair of long-nose pliers, carefully remove rotor plates from the variable condenser until only one rotor plate is left in each section. This should be the slotted plate, for tracking adjustment.

Now turn on the power and locate the receiver's h.f. oscillator by listening on the station receiver. The frequency will be much higher than it was originally, but we will have to go still further. Remove the plug-in coil unit from the bottom of the receiver, noting that it is polarised by the pin arrangement of the three coil plugs. Remove the oscillator coil from its shield can, and carefully remove the core from the coil. This should be replaced after re-winding, and its position is not too critical.

Remove only the large winding of the oscillator coil, and rewind it with about 10 turns as a start, spacewound. The wire size is not critical. We used number 24 enamelled wire. Put the coil back in its shield, replace the coil unit in the set, and turn on the power. The h.f. oscillator should now be somewhere around 15 Mc. on the station receiver. Check the bandspread for approximately the correct limits.

If you are very "foxy," you can use the original dial markings, with new figures, for the new frequency calibration. Slight adjustment of the number of turns, and the oscillator trimmers and padder, will give proper bandspread.

Tracking may be improved if necessary by bending the slotted sections of the tuning condenser rotor plate. Remember our limits of 15,415 Kc. (14 Mc.) and 15,815 Kc. (14.4 Mc.). Rewind the mixer and r.f. coils, using about 11 turns on each, spacewound. Rewind the mixer coil primary, using 18 turns of number 30 d.s.c., interwinding part of it with the secondary, to give increased gain. With the coils back in the receiver, and power on, adjustment of the trimmers should now bring in signals, using a short wire antenna. Slight changes in turns may be necessary, and adjustment of the slotted sections of the tuning condenser rotor plates may have to be made, to secure tracking of these two stages. Now replace the shield over the condenser, and fasten the coil unit securely in place.

Install the noise limiter circuit as shown in Fig. 2, in the ground return of the second detector diode circuit. Replace the bottom cover. Use the station v.f.o. or frequency meter for final receiver calibration with the shield in place. The top cover may now be replaced, and the 14 Mc. receiver is ready

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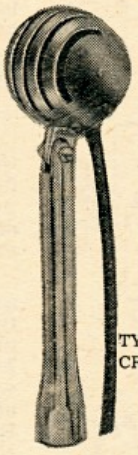
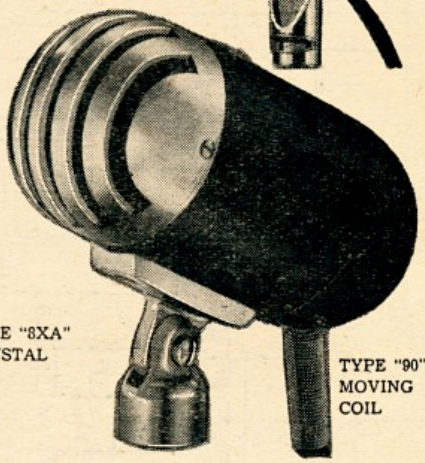


TYPE "8XA" CRYSTAL



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for use. It is an excellent six-tube superheterodyne, capable of pulling in even weak signals with ease.

28 Mc. RECEIVER CONVERSION

The conversion of the receiver for 28 Mc. is performed in a like manner, but with several additional improvements. First, remove the octal r.f. socket, and replace it with a 7-pin miniature socket, for a 6AG5. Replace the 620 ohm cathode resistor R1 (Fig. 1) with a 220 ohm resistor. Remove C6 and connect the small ceramic bypass condensers (as shown in Fig. 3) with as short leads as possible.

From the co-axial jack on the front panel, run a short length of small co-axial cable to terminals 1 and 6 of the oscillator coil socket, using terminal 6 for the shield. Tie terminal 6 to terminal 3 to ground the shield. Connect the 6AG5 filament and the mixer stage filament in series and use a 6K8 as the mixer tube. Each tube draws 0.3 amp. filament current.

Insert a 10,000 ohm 10 watt resistor between R22 and R23 (Fig. 1), to increase the screen voltage to approximately 140 volts. Connect the filaments of the two i.f. tubes in series, and use two 6AC7s in place of the 12SK7s in these sockets. Install the noise limiter circuit as shown in Fig. 2 in the ground return of the second detector diode circuit.

Now remove all but one rotor plate in each section of the tuning condenser, and use 6 turns on the r.f. coil, 5 turns on the mixer coil secondary, 9 turns on the interwound mixer primary, and 5 turns on the oscillator coil grid winding, all spacewound. Wind a one turn link of insulated wire over the ground end of the r.f. coil, and connect it to terminals 1 and 6 of the coil plug.

Using the station receiver, v.f.o. and frequency as before, align the receiver for 28-29.7 Mc. coverage. In this case it will be easier to make a new dial plate than to attempt to make the receiver track to the old markings. As before, the final adjustment should be made with the condenser shield cover, and bottom cover, in place.

The preceding paragraphs cover in a few words many hours of work, but the results are well worth the effort. We now have a receiver that is hard to beat for sensitivity and good signal-to-noise ratio on 28 Mc.

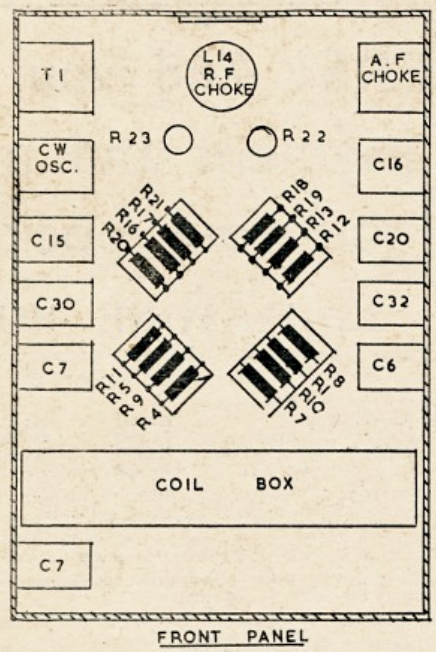


Fig. 4.—Underneath the Chassis.
View of receiver, inverted, and with front panel towards you. There are several other resistors and condensers not shown in the above diagram, but they are easily identifiable by inspection.

DX C.C. MANAGER WANTED

Federal Executive would be pleased to hear from any member who would be willing to act as DX C.C. Manager. The duties of this interesting position include the checking of QSLs and the listing of the DX C.C. members. The present Manager will assist the incoming Manager in taking over the position.

Kindly forward applications to the Federal Secretary of the Wireless Institute of Australia, Box 2611W, G.P.O., Melbourne, or phone WF 5504.

Economical Relay Operation

BY H. E. HODGE,* VK3HE

ALTHOUGH convenient, it is not always necessary to have a separate relay power supply available before relay switching of transmitters and receivers can be used. With many types of relays, it is possible to utilise the current drawn by the receiver from its power supply for their operation. The audio stages of the receiver must, of course, run all the time, and the receiver is disabled while transmitting by removing the h.t. from the screens, or screens and plates of the r.f.—and i.f. perhaps—stages of the receiver. This condition is already provided for in some receivers, such as the BC348.

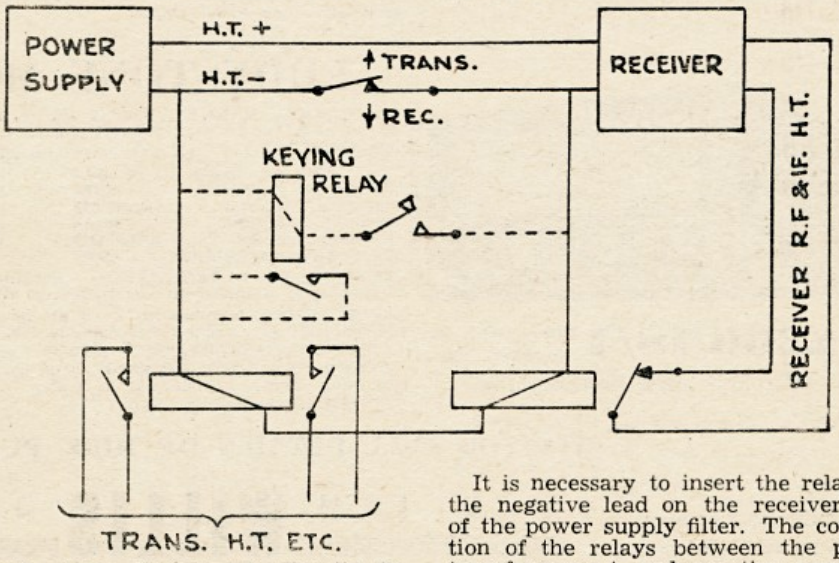
The relays can be connected in various combinations as desired to adjust their current ratings to the receiver current.

This well known method, which is of the "something for nothing" variety, has been in use in the writer's Amateur shack for some years and has been the means of very satisfactory relay operation during that time.

Three different receivers have been used over the years, and each has provided adequate relay power. In the present case, the receiver power supply is a separate unit. and the relays—obtained from a disposals i.f.f. unit—are inserted in the negative lead from power supply to receiver. While receiving, the relay windings are short circuited by the "receive/transmit" switch contacts, preventing their operation, but when the switch is thrown to "transmit," the contacts open—removing the short circuit from the relays, which operate with the receiver current through them, closing h.t. circuits to transmitter, etc., and breaking the h.t. lead to the r.f. and i.f. tube screens in the receiver.

A fairly large reduction in the current normally drawn by the receiver can be tolerated while transmitting as the current required to hold the relays in, once operated, is much less than that required to operate them in the first instance.

A keying relay may be operated, if desired, by connecting the key and relay in parallel with another relay or relays as shown in sketch, provided that the resistance values are suitable.



It is necessary to insert the relays in the negative lead on the receiver side of the power supply filter. The connection of the relays between the power transformer c.t. and negative was tried and found unsatisfactory, as the a.c. ripple there caused chattering of the relays.

* 60 Highfield Road, Canterbury, Vic.

Eddystone Communications Receivers

THREE WINNERS! And you can own one for a nominal down payment and monthly payments to suit your pocket.

£87/3/9 (inc. Sales Tax, Speaker extra)

Width 16¾", depth 10", height 8¾".

EDDYSTONE MODEL "740"

FREQUENCY RANGE: Band 1—30.6 to 10.5 Mc.; Band 2—10.6 to 3.7 Mc.; Band 3—3.8 to 1.4 Mc.; Band 4—205 to 620 Metres.

VALVE LINE-UP:

R.F. Amplifier	EAF42	Beat Freq. Oscillator	EAF42
Frequency Changer	ECH42	Output	EL42
I.F. Amp. and A.G.C.	EAF42	Noise Limiter and S Meter	EB41
A.F. Amp. and Det.	EAF42	Full Wave Rectifier	EZ40

ELECTRICAL PERFORMANCE: Sensitivity is better than 10 microvolts throughout for a 15 db signal/noise ratio and 50 milliwatts.

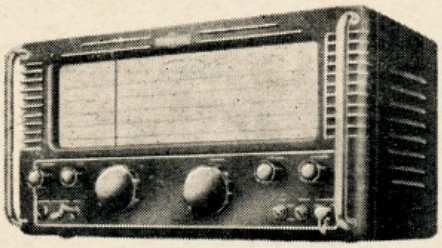
SELECTIVITY: 30 db down 10 Kc. off resonance. Image ratio better than 15 db at 30 Mc. and greater at lower frequencies.

AUTOMATIC GAIN CONTROL: A change of input of 80 db affects the output by less than 25 db.

S METER: A socket at the rear accepts the Ct. No. 669 S Meter.

FINISH: Fine black ripple. Weight 30 lbs.

DEPOSIT £27/3/9 Repayments as low as £2/17/1 per month



£128/7/7 (inc. Sales Tax, Speaker extra)

Width 16¾", depth 10", height 8¾".

EDDYSTONE MODEL "750"

FREQUENCY RANGE: Band 1—32 to 12 Mc.; Band 2—12 to 4.5 Mc.; Band 3—4.5 to 1.7 Mc.; Band 4—1465 to 480 Kc.

VALVE LINE-UP: Eleven valves perform the following functions:—

R.F. Amplifier	6BA6	N.L., S Meter Diodes	6AL5/D77
Mixer (S.F. to 1620 Kc.)	ECH42	Output	N78
Oscillator	6AM6/Z77	Beat Freq. Oscillator	6BA6
Freq. Changer (to 85 Kc.)	ECH42	Rectifier	5Z4G
I.F. Amplifier	6BA6	Stabiliser	VR150/30
Det., A.G.C. and A.F.	DH77		

ELECTRICAL PERFORMANCE: Double Conversion Superheterodyne. Sensitivity is better than 5 microvolts for a 15 db signal/noise ratio.

SELECTIVITY is variable over the range 30 db to 60 db down 5 Kc. off resonance. Image ratio better than 40 db at 30 Mc., greater at lower freq.

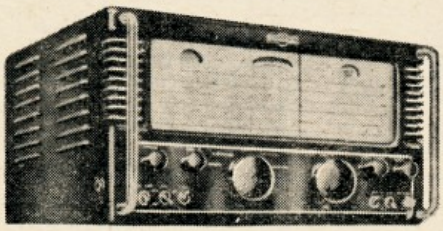
AUTOMATIC GAIN CONTROL: Output level is maintained within 15 db for a 90 db change of input, above 3 microvolts at 8 Mc.

AUDIO OUTPUT: Max. output is 3.5 watts. Pick-up terminals are fitted and audio stages give linear amplification over a wide frequency range.

S METER: Socket at the rear accepts Cat. No. 669 Signal Strength Meter.

FINISH: Fine black ripple. Weight 40 lbs.

DEPOSIT £43/7/7 Repayments as low as £4/3/7 per month



£206/18/4 (inc. Sales Tax, Speaker extra)

Width 16¾", depth 13¾", height 8¾".

EDDYSTONE MODEL "680X"

FREQUENCY RANGES: Band 1—30 to 12.3 Mc.; Band 2—12.5 to 5.3 Mc.; Band 3—5.7 to 2.5 Mc.; Band 4—2.5 to 1.11 Mc.; Band 5—1120 to 480 Kc.

CIRCUIT:—Fifteen valves perform the following functions—

Two R.F. Amplifiers	6BA6	Push-Pull Output	6AM5/EL91
Frequency Changer	6BE6	Beat Freq. Oscillator	6BA6
Separate Oscillator	6AM6/Z77	Noise Limiter, S Meter	6AL5/D77
Two I.F. Amplifiers	6BA6	Rectifier	5Z4G
Detector and A.G.C.	6AL5/D77	Voltage Stabiliser	VR150/30
Two Audio Amplifiers	6BR7		

ELECTRICAL PERFORMANCE: Sensitivity for 50 milliwatts, 15 db signal/noise, 4 microvolts or better on all ranges.

SELECTIVITY: Bandwidths at 6 db down—Minimum 14 Kc.; first intermediate 7.5 Kc., second intermediate 4 Kc., maximum 2.5 Kc., and greater with crystal switched in and phased.

AUTOMATIC GAIN CONTROL: 9 db change of output for 100 db change of input, above 1 microvolt at 9 Mc.

FINISH: Polychromatic Grey. Weight 47 lbs.

DEPOSIT £69/18/4 Repayments as low as £6/14/8 per month

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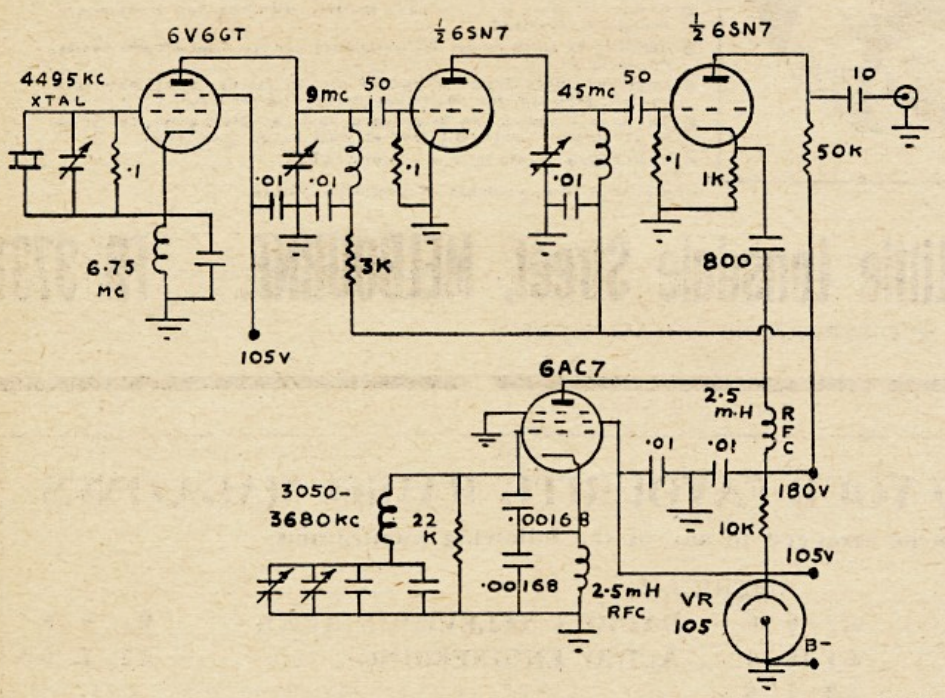
144 Mc. Heterodyne Frequency Meter

DR. ROBERT H. BLACK,* VK2QZ

IN a previous article†, while discussing an approach to stable variable frequency operation at 144 Mc., it was suggested that the method could readily be applied to the construction of a frequency meter. Such a frequency meter has now been built and this article describes it.

The circuit diagram shows that the crystal oscillator and frequency multiplier are standard—commencing with a crystal in the region of 4.5 Mc., output is obtained (by ten times multiplication) at about 45 Mc. In the author's case the crystal was set up at 4495 Kc. and output was thus at 44.95 Mc.



The tubes used were 6V6GT/6G6G as tritet oscillator with output at 8990 Kc. and one triode of a 6SN7 as a quintupler. The second triode of the 6SN7 was used as the mixer with grid injection at 44.95 Mc. and cathode injection at a frequency varying between 3050 and 3680 Kc. It was found that sufficient output was available at 144 Mc. when a 50,000 ohm resistor was used instead of a coil tuned to either 48 or 144 Mc. in the plate circuit of the mixer.

The variable oscillator uses a 6AC7 in a Clapp circuit. The grid coil was obtained from some disposals gear and the dial gave 3,000 divisions for the 180 degrees excursion of the variable capacitor. The range of the meter at 144 Mc. is from 144.000 to 145.890 Mc.

The screen voltage of the 6AC7 (and of the crystal oscillator) is regulated by a VR105. The whole unit is built in a steel box measuring 7" x 7¾" x 5¼"; the power supply being a separate unit. The usual structural precautions were taken to ensure stability of the variable-frequency oscillator.

Calibration consists first of all in accurately measuring the frequency of the crystal. The variable frequency oscillator is then set so that it covers the required range and is then calibrated at 10 Kc. intervals. A table is drawn up and this calibration is converted to the corresponding 144 Mc. band frequencies. In the present case this latter set of frequencies was obtained by the formula:

144 Mc. freq. =
3 (10 × crystal freq. + v.f.o. freq)

Crystal check points were available at three points as shown in the following table:—

V.f.o. Freq.	V.f.o. Harm.	Xtal Harm.	144 Mc. Freq.
3210.7 Kc.	7th	5th	144.482 Mc.
3371.3 Kc.	4th	3rd	144.964 Mc.
3596 Kc.	5th	4th	145.638 Mc.

A further check on the v.f.o. calibration is available using its third harmonic and WWV on 10 Mc.—the corresponding 144 Mc. band frequency being 144.850 Mc.

The signal obtained with no aerial on the output terminal of the meter is adequate for beating with most signals; stronger signals can be reduced by rotating the beam or more output can be obtained from the meter by attaching a small piece of wire to the output terminal. The ease with which zero beat can be obtained with this meter contrasts markedly with the critical tuning when a high-order harmonic of the Bendix is used for frequency measurement at 144 Mc.

The dial readings and the corresponding 3 Mc. and 144 Mc. frequencies were typed out as a list on several small sheets of paper and bound as a small book with stiff cardboard covers. In addition to the 144 Mc. range, incidentally, the oscillator is calibrated over the 3.5 Mc. band and so its output is available for use on the lower frequency Amateur bands.

A suggested set-up is one using a 5000 Kc. crystal (which can be adjusted accurately to frequency, using WWV) and output from the frequency multiplier at 45 Mc. The 3 Mc. output from a Bendix (perhaps amplified) could then be mixed with the 45 Mc. signal. Measurements at 144 Mc. could then be made with the same ease and order of accuracy which is available with the Bendix at its third harmonic frequency.

To conclude, one must answer the question: "Why bother about accurate frequency measurement on 2 metres?" The author was not able to hear VK2WH, whose frequency is 144.002 Mc., until he set up the receiver on that frequency and waited for the signal to appear—which it did.

It may be suggested that a week spent building a frequency meter is a lot of effort to hear just one signal, but one has heard of types spending months looking for the hundredth or two hundredth country on the lower frequency bands.

* "The Chalet," 2 Yerton Avenue, Hunter's Hill, New South Wales.
† "Amateur Radio," December, 1954.

A.O.C.P. CLASS

The Victorian Division A.O.C.P. Class will commence on Thursday, 3rd February, 1955. Morse and Regulations are held on Monday and Theory on Thursday evenings from 8 to 10 p.m. Persons desirous of being enrolled should communicate with the Secretary W.I.A., Victorian Division, 191 Queen Street, Melbourne (Phone FJ 6997 from 10 a.m. to 4 p.m.), or the Class Manager on either of the above evenings.

CHANGE OF ADDRESS

W.I.A. members are requested to promptly notify any change of address to their Divisional Secretary, not direct to "Amateur Radio."

Writing an Article for "Amateur Radio"

Dear Reader,

One of the purposes of this magazine is to publish technical articles. One of the biggest headaches of the Magazine Committee (and in particular of the Technical Editor) is the continual shortage of articles.

From what we hear on the air, there are enough people doing interesting things to positively flood us out with articles. But the articles never arrive, the pen is never put to paper. Why?

Strangely enough, one of the commonest reasons seems to be just plain shyness at commiting things to print. Next is ignorance of how to go about it. Well, we do want YOUR article and if you read on we will tell you how to go about it.

WHAT CAN YOU WRITE ABOUT?

Anything which may be of interest to any other Amateur. If it interests more than one, so much the better. The easiest thing to write about is something you have built, big or small. (There is a terrific demand for small articles of the Hints and Kinks variety.) Test equipment, v.h.f., mobile, antennae, gear for the newcomer, receivers, transmitters are all needed. There is also a place for theoretical or instructional articles, but don't try these without a bit of experience. If in doubt, ask the Editor if he thinks the subject would make a suitable article.

HOW DO YOU WRITE IT?

Technical articles should be written in as simple and direct a manner as possible. The "level" should be chosen to suit the subject and the type of reader for whom the article is intended. Most articles will be intended for that mythical being, the average reader. Simple sentences are usually far more effective than long involved sentences.

Plan your article along logical lines so that the reader does not have to jump backwards and forwards between the various sections. For example, a simple constructional article could be organised as follows:—

Introduction: Scope and aim of the article, advantages of the equipment, etc.

Circuit: General description.

Layout and Construction: Special features.

Operational Details: Alignment, testing, etc.

Results achieved.

If possible, type your article and **always use double spacing**; otherwise use lined paper and remember that your article will have to be read by printers and other persons who may not be acquainted with technical terms, so **write legibly**. For preference use a paper size of 8" wide by 5½" deep (half quarto) and leave 1" margins. The printer, quite rightly, charges us for the extra time involved in handling articles written on the backs of tram tickets, brown paper, confetti, etc. Write on one side only, number each sheet, and write your name and the title on each sheet.

Articles should be as brief and concise as possible; "padding" should be avoided at all costs. Never hesitate to submit an article simply because it appears to be of less than average length.

Use standard English and avoid jargon such as "short" for "short circuit," "amp." for "current," "volts" for "voltage," etc.

When finished, get someone to read it out aloud. You will soon see if it has continuity and is legible to a person other than yourself.

Sketches and circuit diagrams should be drawn on separate sheets of paper with the figure number, title and your name on the top. Almost invariably these will have to be re-drawn by our volunteer draughtsmen. This is one of the hardest yet least known jobs of the Magazine Committee. If you have draughting knowledge or can get it done by a friend, then help us to ease the draughting bottleneck by supplying circuit diagrams ready for the block makers.

The width is the important measurement. If the drawing will occupy one column in width, make your drawing 4½" wide, as it will be reduced in processing to half size. Two and three column drawings should be 9" and 13½" wide respectively.

All lettering should be 3/16" high and make all lines heavy to help reproduction.

To avoid wastage of block costs, all lettering should be kept within the confines of the drawing; we have to pay on the maximum width and height taken by the block maker, in calculating the cost.

At present we cannot afford to print photographs, the blocks cost too much. But we are always happy to print photographs if the author supplies the blocks.

As the circuit is usually the heart of the article, you cannot take too much care in seeing that it is correct, that the values of all components are given and that it is arranged so as to be easily read. There are two systems for giving the component values; one is to print the value by the component, the other is to label them R1, R2—C1, C2—L1, L2, etc., and give a table of values underneath. The first system is probably easier to prepare and to read, whilst the second is the only way of stating voltage ratings, wattages, etc., of components. We have no fixed ideas as to which to use. Probably a compromise system is best where usual components are marked with values and unusual components marked R1, etc., and commented on underneath.

WHAT THEN?

Having written the article and prepared the diagrams, send them to the **Sub-Editor of your State**. His address appears in the heading of Federal and Divisional Notes in the March, June, September and December issues of "Amateur Radio." The Sub-Editor collects all notes and articles for the State and sends them to the Editor. On receipt here, the Secretary of the Victorian Division will acknowledge receipt to both the Author and the Sub-Editor concerned. If you do not receive acknowledgment in say three or four weeks, contact your Sub-Editor and ask him what's happening.

The normal delay for draughting, block-making, and type setting is about six weeks. Articles and blocks have to be in the printer's hands not later than the first of the month prior to the month of publication. So the shortest possible time in which an article can be published is approximately three months. Circuits which involve a lot of draughting might take longer.

Looking forward to your article,

We remain, your humble servants,

THE MAGAZINE COMMITTEE.

AWARDS FOR TECHNICAL ARTICLES

The Council of the Victoriain Division, W.I.A., have decided to make an annual award of up to £5 available for the best article or articles printed in "Amateur Radio" from July issue to June issue of the following year. The judging to be carried out by the Magazine Committee of "Amateur Radio."

A.R.R.L. CONTEST

Phone: Feb. 11-13 and March 11-13
C.W.: Feb. 25-27 and March 25-27

In the 21st A.R.R.L. Contest two week-ends are devoted to c.w. and two to phone operation. The rules are the same as those of last year, with this exception: U.S. and Canadian Amateurs will send a signal report plus their State or Province (instead of indicating input power). This information is of special interest to overseas stations aiming to fill in States for W.A.S. and Provinces for W.A.V.E.

Phone Section: 2400 hours GMT Feb. 11 to 2400 hours GMT Feb. 13; 2400 hours Mar. 11 to 2400 hours Mar. 13. C.w. Section: 2400 hours GMT Feb. 25 to 2400 hours GMT Feb. 27; 2400 hours Mar. 25 to 2400 hours Mar. 27.

ERRATA

In the article, "An Electronic Keyer," December, 1954, issue, the author has drawn our attention to some errors in same. Under the heading of "Circuit," line 14, R5 should read R6. In Fig. 1, the 1 meg. resistor in plate circuit of V1 should read R6. In the same diagram the power supply symbols should be reversed, i.e. h.t. positive is earthed and h.t. negative connected to circuitry.

NATIONAL FIELD DAY, 1955

RULES

1. The National Field Day Contest of the Wireless Institute of Australia will be held on **Sunday, 6th March, 1955.** The Contest will be of 12 hours' duration, commencing at 0900 hours E.A.S.T. and will continue until 2100 hours E.A.S.T.

2. The Contest is limited to portable stations operating within the Commonwealth and its Mandated Territories on a power not exceeding 25 watts input to the final stage with the aerial connected, with a special section for fixed stations working to portable stations, and a special multiplier which, it is again hoped, will encourage the use of low power equipment.

3. A portable station for the purpose of the Contest is defined as one whose power is not derived from either private or public mains, shall not be located closer than five miles airline from the home of the operator(s) and shall not be situated in any occupied dwelling or building.

4. No apparatus is to be set up or erected on the site of the portable station earlier than 24 hours prior to the commencement of the Contest. A station may be moved from one site within a State to another within the same State during the Contest.

5. More than one operator may be used in the operation of the portable station, provided that all operators are licensed Amateurs.

6. Operation may be on any of the recognised Amateur bands, and more than one transmitter may be used, providing that only one transmitter is used at any one time.

7. When calling, c.w. stations will use the call "CQ NFD," and phone stations will use the call "CQ National Field Day" to indicate that they are portable stations. Attention is directed to the requirements for portable operation as defined in the P.M.G. Handbook for the Guidance of Amateur Operators.

8. **Sections**: The Contest is divided into four sections, namely:—
   (a) Open,
   (b) C.w.,
   (c) Phone,
   (d) Fixed Station.

The open section will consist of phone and c.w. Portable station participants may enter each of sections (a), (b), and (c), provided a separate log is entered in each case.

9. Logs must be forwarded to the Contest Committee **through the Divisional Council** for membership checking in time to reach Box 1234K, G.P.O., Adelaide, not later than Saturday, 2nd April, 1955.

10. Logs must be filled in in the following order: Date, Time (E.A.S.T.), Band, Emission, Power Input to the final stage with the aerial connected, Call Sign of the Station contacted, RST number sent, RST number received, location of station contacted, points claimed. The log must be headed with the title of the Contest, section entered, call sign of the competitor, location of the station. At the conclusion of the log a summary of contacts must be shown together with a description of the equipment used including h.t. voltage to the final stage, tube(s) in p.a. stage, antenna used, and call signs of all operators.

11. The completed log must be signed by each of the operators with a statement that the P.M.G. Regulations and the rules of the Contest have been observed.

12. The decisions of the Federal Contest Committee will be final in all matters concerning the Contest.

13. Failure to completely observe the conditions of rule 10 will lead to automatic disqualification of a competitor.

14. **Scoring**: For the purpose of the Field Day the following constitute VK Districts: VK2, VK3, VK4, VK5 (South Australia), VK5 (Northern Territory), VK6, VK7, VK9.

15. Serial numbers must be exchanged during the Contest. Failure to record current serial numbers will mean loss of all points for that contact. Serial numbers will be as follows: The first three figures will be the RST report in the c.w. section, followed by the serial number of the contact. Serial numbers may commence with any number between 001 and 100 for the first contact, increasing by one for each successive contact. In the phone section the first two figures will be the RS report as in the c.w. section, followed by the three serial numbers. In addition, the QTH must be given in all cases.

16. Points will be awarded as follows:

Portable Stations—

(a) For contacts with a fixed station within the Commonwealth (Rule 14) including the competitor's own State .... **1 point.**

(b) For contacts with other portable stations within the same State .... **2 points.**

(c) For contacts with stations in Asia, Oceania, North America, **3 points.**

(d) For contacts with stations in other countries other than (a), (b) and (c) .... **5 points.**

(e) For contacts with other portable stations outside the competitor's own State .... **10 points.**

In order to encourage QRP operation, for portable stations, the total number of points scored will be divided by the power input in watts (with the aerial connected).

If more than one transmitter and/or input power is used for portable contest purposes, the "power in watts" will be calculated as the average.

Fixed Stations—

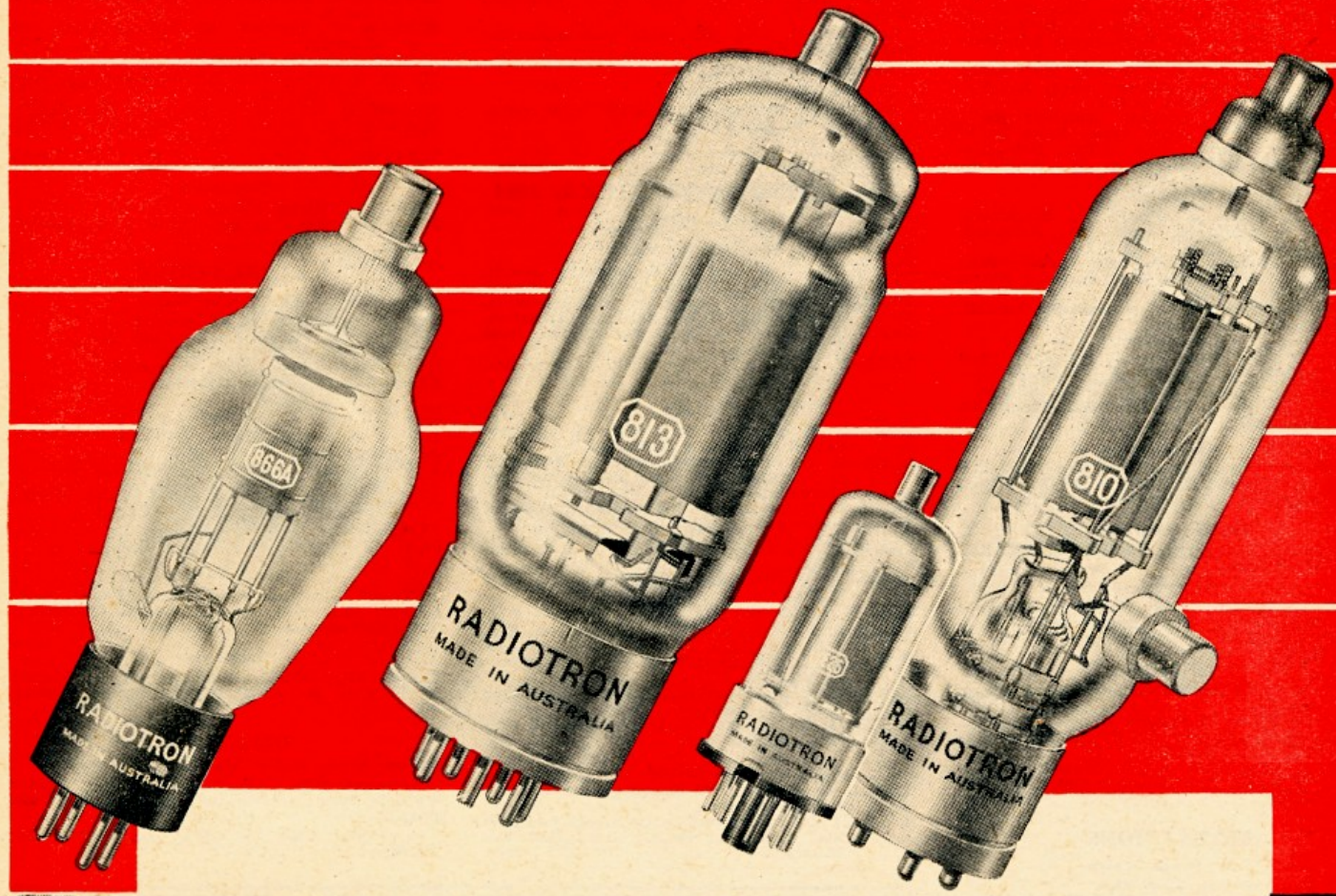
(f) For contacts with portable stations in the Contest within the same State .... **2 points.**

(g) For contacts with portable stations in the Contest outside the State .... **5 points.**

17. **Awards**: An attractive certificate will be forwarded to the outright winners in each section, namely, Open, Phone, and C.w. Certificates will also be awarded to the winners of each section in each State, and to the fixed station in each State with the greatest number of points gained in contacting portable stations in the Contest. Further certificates may be awarded at the discretion of the Federal Contest Committee. The outright winners are not eligible for State Awards.

18. Certificates will be awarded to each operator of the winning stations, provided each operator has contacted at least 25% of the stations contacted.

RADIOTRON POWER VALVES



Today's high standards of radio performance are dependant upon the use of first quality components.

Radiotron valves are manufactured to exacting standards which ensure you of the ultimate in performance at all times.

Be sure of the quality and consistency of your signals by using Radiotron Power Valves.

Important: When ordering valves, be sure to mention "Amateur Radio" so that priority can be given to your order.

AWV **RADIOTRON**

AMALGAMATED WIRELESS VALVE CO. PTY. LTD.

AMATEUR CALL SIGNS

FOR MONTH OF NOVEMBER, 1954

ADDITIONS

VK—

New South Wales

2ON—R. L. Douglas, 9 Hillside Cres., Epping.
2WO—H. F. Owen, 31 Walton St., Blakehurst.
2ABG—T. J. Brown, 100 Woolooware Rd., Burraneer Bay, Cronulla.
2AFL—G. J. Lee, 113 Victoria Rd., West Ryde.
2ALR—L. R. Burston, Officers' Mess, R.A.A.F. Station, Canberra, A.C.T.
2ANP—Naval Hdqs. Sydney, Amateur Radio Station, East Aust. Area., Potts Point.
2AVW—G. A. Warner, C/o. O.T.C., Bringelly.
2ZAT—J. Wakefield, Hargrave St., Armidale.

Victoria

3BX—G. W. Hitch, 31 O'Hara St., Blackburn.
3AJL—W. R. Adey, 16 George St., Ashwood, S.E.11.
3AQM—H. P. Morris, Station: Yacht "Pandora," Port Phillip Bay; Postal: 1 Raven St., Kew, E.4.
3ZAG—I. W. Herbert, 7 Lower Main St., Stawell.

Queensland

4BE—A. F. W. Taylor, C/o. Dept. of Civil Aviation, Aeradio Station, Townsville.
4XM—W. A. McDivitt, 149 Esplanade, Cairns.
4ZAS—L. L. Sharp, 9 Dora St., Moorooka, Brisbane.

South Australia

5DW—D. W. Tacey, 23 Main Ave., Frewville.
5FY—R. A. Catmur, C/o. Mr. A. V. Fergusson, Eighth St., Gawler West.

Western Australia

6ZAM—M. R. Meharry, 98 Kalamunda Rd., Kalamunda.

Tasmania

7PH—N. G. Williams, Launceston Airport, Free Bag Service, P.O., Launceston.
7ZAH—L. J. Hodkinson, Wellington St., Longford.

Territories

1DC—D. R. L. Callow, Macquarie Island (temp. license).
1ZM—B. E. Shaw, Macquarie Island.
9OQ—D. F. Lloyd, C/o. O.T.C. Receiving Station, Port Moresby.
9TC—T. M. Cole, C/o. R.T.C., Wewak.
9YG—G. E. Smith, C/o. Weather Office, Norfolk Island.

ALTERATIONS

VK—

New South Wales

2KR—7 Paton Street, Woy Woy.
2OS—28 Flanders Avenue, Muswellbrook 3N.
2TE—37 Estelle Street, Maryville, Newcastle.
2VQ—52 Lauderdale Avenue, Manly.
2AAH—37 Myrna Road, Strathfield.
2ACM—C/o. Dept. of Civil Aviation, Radio Construction, P.O. Box 41, Mascot.
2ACS—Station: 32 The Circle, Griffith; Postal: Box 631, Griffith.
2ARD—East Camp, S.M.A., Cooma.
2AST—226 Concord Road, Concord West.

Victoria

3AB—16 Doncaster Road, North Balwyn.
3BR—Police Station, Tangambalanga.
3IQ—Yacht "Southlander," Hobsons Bay Yacht Club, Williamstown.
3KP—6 Parkside Street, Malvern, S.E.4.
3MH—18 David Street, Preston.
3UE—12 Jellicoe Street, Box Hill South.
3AAC—5 Boorool Road, East Kew.
3AEC—C/o. Post Office, Bairnsdale.
3AKC—8 Crisp Street, Wangaratta.
3ALN—5 Farmers Street, Nhill.
3APK—Ward 10, Geelong Hospital.
3ARI—24 King Street, Ballarat East.
3ARY—33 Washington Street, Essendon.
3AXX—Station: 5 Paterson St., Carrum; Postal: Box 127A, Elizabeth St. P.O., Melbourne.

South Australia

5AO—19 Hardy Street, Goodwood Park.
5HE—8 James Street, Plympton.
5KH—Hills Road, Eden Hills.
5KJ—90 Millswood Crescent, Millswood Estate.

Western Australia

6KU—35 Gairloch Street, Applecross.
6SK—Lot 88, Evans Road, Mt. Helena.

Tasmania

7CJ—C/o. 7NT Radio Station, Kelso.
7MC—55 Paterson Crescent, George Town.
7SF—4 Mark Street, Hillcrest, Burnie.

Territories

9VG—C/o. Dept. of Posts and Telegraphs, Lae.
9WK—C/o. R.T.C., Madang.

DELETIONS

New South Wales: VKs 2ZK (now operating under VK4BE), 2AAU, 2AOQ (now operating under VK9OQ), 2AXM (now operating under VK4XM).

Victoria: VKs 3BN, 3DW (now operating under VK5DW), 3GF, 3KT, 3PH (now operating under VK7PH), 3SU, 3YG (now operating under VK9YG).

Queensland: VKs 4BN, 4LQ (now operating under VK2ALR).

South Australia: VK5WJ.

Western Australia: VK6DJ.

Territories: VKs 1BA, 1RL, 9GW (now operating under VK2AVW).

FOR MONTH OF DECEMBER, 1954

ADDITIONS

VK—

New South Wales

2SD—L. W. N. Squires, 27 Fletcher St., Bondi.
2AUR—G. V. Randall, 8 Chisholm St., Inverell.
2AVI—A. Isaacs, 43 Tupper St., Marrickville.
2AXP—J. W. Porter, 11 Telopia Ave., Caringbah.
2AZS—D. Sellars, 90 Sandringham St., Sans Souci, Sydney.
2ZAS—S. D. Russell, "The Nook," Oakes Rd., West Pennant Hills.

Victoria

3WB—R. S. Beckett, No. 8 Married Quarters, School of Signals, Balcombe.
3AED—P. A. Delahenty, Station: 33 Piccadilly St., Oakleigh; Postal: 21 Toward St., Murrumbeena.
3AHU—H. C. Utber, Mornington Rd., Frankston.
3AIW—L. H. Weller, Main St., Merrigum.
3AKT—M. K. Tulloch, Fernshaw Rd., Healesville.
3AQK—R. J. Hildebrand, 133 Simpson St., East Melbourne.
3ZAJ—J. I. Kelleher, 3 Paine St., Newport, W15.
3ZAQ—D. H. V. Rankin, 1879 Malvern Rd., East Malvern, S.E.5.
3ZBH—R. J. Harrison, 7 Tiernan St., Footscray, W.11.
3ZBS—B. M. Stares, 17 Daffodil St., Wendouree West, via Ballarat.
3ZBW—D. G. Walker, The Lodge, Ormond College, Carlton, N.3.

Queensland

4VR—L. D. Rickaby, 33 Babbidge St., Coopers Plains, Brisbane.
4ZAF—D. A. Fraser, Station: Cr. Locke and Ann Sts., Warwick; Postal: P.O. Box 131, Warwick.

South Australia

5ZB—E. B. Stephenson, 4 Piccadilly Circus, Colonel Light Gardens.
5ZAB—B. C. Jellett, Norton Vale, Hynam.
5ZAT—G. P. Tuck, 57 Cowra St., Mile End, Adelaide.

Western Australia

6ZAQ—D. A. Meadowcroft, 132 Eton St., North Perth.
6ZAS—S. J. Stewart, 95 Railway Pde., Mt. Lawley.

Tasmania

7IJ—D. R. Twigg, C/o. D.C.A., Cambridge Airport, Hobart.
7RN—R. D. Nicholls, 30 Pearl St., Wivenhoe.
7ZAB—P. E. Blundstone, "Barclay," Whitemark, Flinders Island.
7ZAC—D. G. Cartwright, 38 Mary St., Launceston.

Territories

1HH—H. J. Hicks, Macquarie Island.
9VW—G. Stobie, C/o. Post Office, Port Moresby.

ALTERATIONS

VK—

New South Wales

2EI—38 Fuller's Road, Chatswood.
2NX—Korisset Road, Cooranbong, 1N.
2SQ—19 Jubilee Street, Dubbo.
2AKN—21 Urunga Street, Balgowlah.
2ASG—8 Duke Street, Grafton.

Victoria

3PW—3 Khartoum Street, Caulfield.
3QC—Tone Road, Wangaratta.
3VQ—4 Burgess Street, Beaumaris, S.10.
3XJ—11 Vialls Avenue, Parkdale.
3AMH—Station: Walker St., Ballarat North; Postal: 208 Eyro St., Ballarat.
3AND—Coorio Avenue, Rosanna.
3ARI—13 Barkly Street, Ballarat.

South Australia

5KX—297 Goodwood Road, Kings Park.
5SR—60 McDonald Avenue, New Hindmarsh.
7BL—Kelvedon Avenue, Taroona.

Tasmania

7RC—Station: Western Junction Airport; Postal: C/o. D.C.A., P.O. Box 416, Launceston.

DELETIONS

New South Wales: VK2KC.

Victoria: VKs 3IJ (now operating under VK7IJ), 3VW (now operating under VK9VW), 3AQC.

Tasmania: VK7ZAD (now operating under VK7RN).

FIFTY MEGACYCLES AND ABOVE

NEW SOUTH WALES

The last meeting of the V.h.f. Group for 1954 took place at the usual meeting place, Petersham Technical College, on 3rd December, when the evening was devoted to films and shots of various field stations at their location during the October Field Day and snaps of the havoc a storm made to Ted 2XX's tower. The first film was a story of the evolution of the motor car, from the horseless buggy type to the present streamlined version. The second film was the 1954 Redex Trial and those present decided the drivers taking part would not be allowed to take part in our 144 Mc. "Fox Hunts" as the experience in driving cross-country would give them too great an advantage.

During the interval between films the Group listened to an ABC feature on the work of the C.S.I.R.O. in the field of Radio Astromony, discussion on various aspects of the equipment used brought to light many interesting features as several members had seen some of the equipment in actual operation.

The event for December was a Merry Xmas Scramble held on Wednesday night, 22nd Dec. A total of 24 stations took part. The idea was to work as many stations as possible and exchange Xmas Greetings. A very enjoyable night was had by those taking part. The results were 2ALO/P and 2ANF 21, 2APQ 20, 2WJ/P 17, 2HL and 2ALJ 14, 2ZAR, 2ABZ, 2AKK and 2CE 12, 2HO 11, 2AHP and 2AVI 10, 2PF, and 2ABH 9, 2ACK and 2ABR 8.

General activity on 2 mx has been limited to only two or three stations operating each evening as the holiday period has taken a few out of town and the Ross Hull Contest keeping those on 50 Mc. busy awaiting and watching for DX openings which, so far, have not been up to expectations. Only one or two really good openings to ZL, however all VKs have been heard and VR2CG worked by several. Judging from comments, the VK4s have been giving a good account of themselves.

The February meeting of the Group, to be held on Friday, 4th, should be an interesting one. The lecture of the evening will be given by Mr. Barry Goodman, 2ZAG, his subject being "V.h.f. Antenna Theory and Design." So if you have any problems or pet theories regarding the antenna you intend to build, come along and hear what should be a very interesting lecture. Also sidelights on "Operation Roof Top" will be given by 2HO and 2APQ together with a recording of 2 mx signals heard at Mt. Kosciusko and no doubt comments from those who heard our signal from Mt. Kosciusko and made contact, not forgetting the "Admiral" 2ABO on his deep sea experiences regarding 2 mx.

Technical activities during Dec.-Jan. period appeared to be trying to cope with the various festive gatherings associated with that period. One function which a number of the Group attended was the Gladesville Radio Club's Annual Barbecue when a very enjoyable evening was spent with all the trimmings in keeping with the season. Best wishes to the club and thanks for the invitations.

Three new stations appeared on 2 mx. Alf 2AVI's brother to Admiral Ted 2ABO; congratulations Alf on getting your ticket, may you have plenty of contacts; also Max 2AUA, of Herne Bay and Peter 2AQC, of Turramurra. Welcome to the v.h.f. bands, chaps, and all look forward to contacts with you; don't forget the V.h.f. Group meetings.

A visitor to Sydney over the Xmas New Year period was Noel 2APE, from Dubbo, and who was operating portable from Ramsgate and made contacts with many of the Sydney gang. Arch 2GU seems a bit discouraged with 2 mx as he has not contacted Sydney for some considerable time although he reports hearing signals. So what about turning your beams South and give Arch a call?

Very little has been heard from the North Coast regarding the 2 mx link to VK4 and to the Urunga Convention. The management Committee would like to hear some suggestions, so that this fixture can be arranged. So what about dropping a line to the Secretary, V.h.f. Group, Box 1734, G.P.O., Sydney, and let us know your thoughts on this project?—2APQ.

VICTORIA

Signals seem to be solidly on the up grade on the 50 Mc. band as several of the VK3s have worked VK6, 5, 4 and also VR2. The ZLs are also coming through at good strength. During the DX session, 3ANQ (Warrnambool) broke through with extremely good signals into Melbourne. He worked Max 3BQ and Len 3LN, reporting them both at S9. Also short-wave listener, Jim Hunt, of Frankston, reports having heard the following stations on 50 Mc.: ZL2ABX, ZL2KT, ZL2DS, ZL2ACB, VKs 5MX, 5ZL, 4PQ, 4CU, 4GG, 4BT, 4NG, 4TY, 4PT, 4CB, 4HR, 4AF, 4RH, 4WD and 2ATS.

There was a record entry for the Fox Hunt in December when ten cars took the road. We welcome Ted Howell and Peter McEwan, David 3ZAY, Ian 3ZAM and Berry 3APB to the hunt for the first time. Max 3BQ again acted as control station and was ably assisted with cross bearings from Bill 3ZAC, Bob 3WY and Bob 3OJ, and we offer to them our thanks for their assistance.

As the Fox, 3LN, had been granted slight license as a Xmas gesture, the fox car turned up at the starting point with a noticeable amount of decoy camouflage. Immediately after the start, the fox car went home to Ascot Vale and changed the entire equipment into a different make of car, also changed the aerial into a hand-supported dipole which could be withdrawn close into the car when the occasion demanded it, and Len 3LN was back on the air within three minutes. Drivers were also changed, Phyl taking over the driver's seat and Len sitting on the floor of the back seat with the tx so that only one person appeared to be in the car. Under these conditions on the first run all cars were evaded. However the fox was able to slide past Berry 3APB without him noticing. All went well on the second run when the fox literally was able to circle Ted Howell and the 3VZ-3IE combination. Jack 3VZ had two welcome visitors in the car with him in Councillor Jim 3NY and Clem 3GY. However after a few miles, Jack 3VZ seemed to recognise that a particular car number seemed to be about whenever the signal was strongest and he made the first catch of the evening, followed only seconds later by the 3YS-3ABA combination and passenger Glen Jennings. There seems to be some doubt as to who was the actual winner, so perhaps we should call it a dead-heat as the stewards are still arguing it out.

On the last run, 3YS and 3VZ, with their newly gained knowledge of the different make of car, were again successful and the fox had the pleasure of driving past 3ALY, Ted Howell and the 3ZAY-3ZAM combination several times. However outside the final location, 3AIK, 3ADU and all other cars found the fox with the exception of Graeme 3ZAA and Norm Dench. The final location was a secret from all including the host, Berry 3APB, who returned home with his supper which, by the way, was a decoy supper consisting of one potato, three slices of stale bread and a thermos of cold water. It would have been too bad if Berry had felt peckish on the way round and had decided to have a little nibble. Heather, Berry's XYL, hurriedly covered up Berry's confusion when he opened up his supper parcel by telling him that an excellent looking sponge cake, which Heather had made and decorated with the words: "A Merry Xmas to the V.h.f. Group" was his, Berry's contribution towards the supper. The gang soon made short work of Berry's contribution. Twenty-five of the gang participated in the post mortem and supper and we wish to thank Berry and Heather for opening their home to us and their friendly hospitality.

The December meeting of the V.h.f. Group took the form of a visit to the Monitoring Station at Mont Park where Mr. Oxnam and Mr. Roberts conducted a tour of the frequency measuring section and the short-wave receiving station. Twenty-seven of the Group thoroughly enjoyed the visit and a few disquieting pieces of information were gleaned. Of particular interest was a copy of the Berne Convention frequency assignment when we found that some sixty Commercials were officially assigned into the 20 mx band and about 300 assigned frequencies in the 7 Mc. band. This information certainly gave a jolt to those of us who had assumed that at least some of these frequencies were 100 per cent. Amateur assignment. An interesting evening concluded with a vote of thanks proposed by Fred 3YS.

At the next V.h.f. Group meeting on 16th February, at 8 p.m. in the W.I.A. Rooms, 191 Queen Street, Hans Albrecht, VK3AHH, will deliver an illustrated lecture entitled "Electronics in Meteorology." All are welcome.—3LN.

WESTERN AUSTRALIA

50 Mc.: It's happened at last! After a couple of false starts, at 0830 on 3rd January, VR2CG broke through to contact 6HK and 6WG for the first Fiji-Western Australia QSOs on 50 Mc. On this same day the band was open to all States of VK and ZL2 with good signals, providing the best day for DX experienced this season, but only a shadow of the conditions enjoyed during 1953-54. Still, we must be thankful for small mercies!

6BO has been in for his share of the DX but is still plagued by a power leak which reaches colossal proportions at times. As Rolo would put it, "it can wear you a bit thin!" 6SJ returned from his Eastern States trip and was highly delighted to get among the DX by working into VK4 and VK5. Sid has asked me to register his appreciation of the fine hospitality offered by the gang in VK3 and VK5; 3LN, 3ATN, 3ATR and 5MK in particular. I think there will be quite a few new ideas incorporated in the rig as a result of his visit. 6GU has been having a run of outs with the DX, he finds that conditions at Fremantle are not always the same as in Perth. Signals appear to be up in one QTH and down in the other and vice versa.

6AW has been threatening activity again on 6 mx, but the lack of a suitable crystal appears to be a difficulty at present. Denis has a rx in operation which appears to work very well, and has been working crossband from 144 Mc. 6ZAE, 6ZAT and 6ZAZ have likewise been working crossband duplex. Cecil 6ZAZ has had a couple of 3½ hour marathons with 6WJ in this way. At one stage Warren's rig looked like overheating, so out came a blower motor to cool it off, but it was the modulator, not the final that needed most attention! Some people can talk!

144 Mc.: Activity may be forcibly reduced on this frequency during the next few months as 6AT, 6ZAK and 6ZAE have all been absorbed by the N.S.T. scheme. At least the authorities must want some work done, as they saw fit to send each to a different service! Both 6ZAA and 6ZAZ now possess 30 ft. towers standing in a vertical position, which should have the beams in place by now. Wally proposes putting his old five over five up at about 40 ft. but Cec. has ideas of a 16 el. phased array. 6AW should have his new tower up shortly, and also favours the phased array, but only 12 el.

6RK on once again and putting out a very potent signal from his 815 and 3 el. beam. What was that back-to-front ratio Roger? 42 db? 6WJ has completed a converter for 2 mx at last. It works out very nicely and with a 5 el. beam, Warren hears all there is to be heard. 6ZAB was seen at the Xmas meeting and promised activity during January, not heard to date though. 6ZAM is another who is progressing towards emitting a signal. According to the grapevine, there's quite a deal of activity pending on the Goldfields from the "Z" call signs so there might be a good chance of some 350 miles DX before long.—6HK.

AUSTRALIAN V.H.F. RECORDS

TWO-WAY WORK

Band Mc.	Stations	Date	Miles	World Rec'd
50	VK5KL-W7ACS/KH6	26/8/47	5355	10500
	VK3IM-VR2CB	30/12/53	2405	
	VK7BQ/LZ-VK9DB		2211	
144	VK3GM/3-VK7LZ/PF	9/3/52	317	1400
288	VK3AFJ/3-VK3AAF/3	21/3/54	63.8	—
576	VK3ANW-VK3AKE	11/12/49	81.6	—
1215				100
2300	VK3ANW-VK3XA	18/2/50	9.1	150
5650				—
10000				109
21000				800 ft.
30000				—

It is in the interests of all v.h.f. enthusiasts to notify F.E. through Divisions, if you can better the above figures. Please give **exact details** of both stations' locations for checking, when submitting your records.

CALL SIGNS

It has been noted with concern that there has been a growing tendency during recent months for licensees of Amateur Stations, particularly when engaged in telephony transmissions, to omit the prefix "VK" when announcing station call signs.

Such practice is, of course, not in accordance with International requirements, and contravenes the Wireless Telegraphy Regulations under which stations operate. Regulation 60 states that the licensee of an Amateur Station shall at all times transmit the full call sign allotted to the station concerned.

"ACOS" CRYSTAL MICROPHONES and MICROPHONE INSERTS

A Complete Range For Every Purpose

MIC 36

£6/18/6

Housed in attractive plastic case, this Microphone is ideal for home recording and public address, etc. Response unexcelled for its size and price. The performance is not affected by vibration, shock or low frequency wind noise. Omni-directional frequency response substantially flat from 30 to 7000 c.p.s. Recommended load resistance not less than 1 megohm dependent on low frequency response. Can be supplied complete with switch and floor stand adaptor as required at a small extra cost.

MIC 16

Designed to meet even the most exacting requirements, this Microphone incorporates the world famous floating crystal sound cell construction. Its special characteristics are that its fine performance is not affected by vibration or shock. The fidelity is not impaired by low frequency wind noise.

SPECIFICATION

Recommended load resistance—not less than 1 megohm.
Output level —65 db ref. 1 volt/dyne/cm².
Frequency response—substantially flat from 30 c.p.s. to 10,000 c.p.s.
Directivity—non-directional.
Size—2⅛" spherical diameter.
Connector—Standard international 3-pin.

£24/19/6

MIC 35

£2/15/-

The MIC 35, undoubtedly the best value ever offered, is ideal for amateur transmitters, public address, etc. Housed in an attractive die-cast case, it features a high sensitivity and substantially flat characteristics. Provided with a built-in shunt resistance of 2 megohms, it will, when connected to the grid of the input valve, give a substantially flat response from 50 to 5000 c.p.s.

SPECIFICATION

Output level: —55 db ref. 1 volt/dyne/cm².
Cable—approx. 4 ft. of co-axial supplied.
Weight—6 ozs. unpacked, 7 ozs. packed.
Dimensions—microphone only 2¼" x 2⅛" x ⅞"

MIC 22

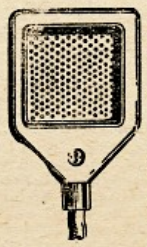
This omni-directional Microphone is robust in construction, with a pleasing appearance. Vibration, shock or low frequency wind noise will not affect the performance. The low frequency cut-off is dependent on the load resistance. The cut-off is given by the quotation, F = 80 ÷ R, where F = c.p.s., R = megohms. An adaptor (floor mounting) is available at low extra cost.

SPECIFICATION

Output level = —50 db ref. 1 volt/dyne/cm².
Output impedance—equivalent to approximately 0.002 uF. (0.8 megohm at 100 cycles).
Frequency response—substantially flat from 40 to 6000 c.p.s.
Recommended load resistance—not less than 1 megohm, dependent on low frequency response.

£9/18/6

MIC 28



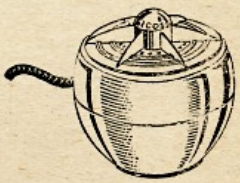
£5/19/6

Designed to give freedom of movement, this Microphone is small and non-directional. Housed in a soft moulded rubber case, which gives protection against shock, it is provided with a pin at the rear of the case for pinning to the lapel.

SPECIFICATION

Output level—approx. —55 db ref. 1 volt/dyne/cm².
Recommended load resistance—5 megohms.
Frequency response—level throughout the whole of the audible spectrum.
Capacity—0.0015 uF. at 1000 c.p.s.
Impedance—100,000 ohms at 1000 c.p.s.
Cord—6 ft. shielded cable.
Size—1-9/16" wide x 2¼" long x ⅝" thick.

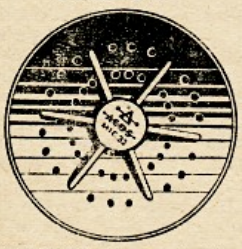
MIC 33



£6/18/6

This Microphone has been designed for the high quality public address and home recording field. High sensitivity and flat characteristics are obtained by a specially designed acoustic filter. Housed in an attractive plastic case with an unexcelled response for its size and price. Unaffected by vibration, shock or low frequency wind noise. Omni-directional frequency response substantially flat from 30 to 7000 c.p.s.

MICROPHONE INSERTS



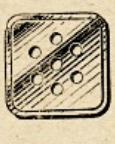
(MIC 32 illustrated)

CRYSTAL MICROPHONE INSERTS

These inserts are available in varying sizes ranging from as small as 15/16" square to 1-13/16" round, with various thicknesses from 7/32" to 9/16". Suitable for every purpose such as hearing aids, public address, tape recording, amateur broadcasting, etc., they have responses from 2250 c.p.s. to 3500 c.p.s. at 5 db to 30 db. Insert can be supplied with or without 10 meg. resistor as required.

MIC 32 insert, **£2/15/6**; all others, **£1/19/6.**

MICROPHONE INSERTS



(MIC 23 illustrated)

EXCLUSIVE AGENTS: **AMPLION (A'SIA) PTY. LTD.** **SYDNEY, AUSTRALIA**

DX ACTIVITY BY VK3AHH†

PROPAGATION REPORT

3.5 Mc.: Unfortunately, observations on conditions were restricted to **European** breakthroughs between 1800 and 1900z.

7 Mc.: Openings on this band deteriorated during the month which is, to some extent, explained by an increase in the general noise. Long-path break-throughs to **North America** (1900-2100z) were reported beside the normal openings to W-land from 0700 to 1500z. **European** signals were represented, rather weakly, over the long route around 0800z and on the short path from 1600 to 2100z. The **Far East** and **Pacific Islands** were reported to be workable with some regularity between 0800 and 1400z.

14 Mc.: Conditions on this band have been reasonable at times. The **African Continent** was well represented between 1230 and 2200z, with long-path signals from **North America** around 1800-2300z. **Europe** and the **Middle East** were workable over the short route (1100-1600z) with **South** and **Central America** around 1000-1400z. **South East Asia** and the **Far East** have been reported from 0600 to 1500z.

21 Mc.: As can be expected for this season at conditions of minimum sunspot activity, DX openings on this band were unreliable and fairly unstable. Nevertheless, some breakthroughs to the **American Continents**, **South East Asia** and **Europe** as well as **Africa** have been reported during the period 2200 to 1100z.

27-28 Mc.: These bands have shown some short-skip conditions to New Zealand and all States of Australia.

NEWS AND NOTES

There is a little ship rolling in the southern part of the Indian Ocean on the way to the southern-most continent—Antarctica. Heavy seas seems to be playing ball with the boat and the men aboard, but it is certainly not a trip for the sake of sea voyage alone! It is the expedition to **Mawson**, the Australian Antarctic Base established by the 1954 team there, and the new men now aboard the Kista Dan are looking forward to important research and new discoveries on that block of ice down south. Naturally, there are some Amateurs in the new party and they all promise to look for us VKs on the mainland! Let us hope that many contacts will result during 1955 with (see "A.R." 1/55) Eric **VK1EM**, Bob **VK1RA**, and Hugh **VK1AWI**.

Activity from the 1955 team on **Macquarie Island** has already been reported on the Amateur bands. As mentioned in last month's notes, their call signs are: Harry **VK1HH**, Bernie **VK1ZM**, and David **VK1DC**.

Wishing them a bon voyage and welcoming the boys back from Macquarie Island—namely, Chas **VK1AC**, Gordon **VK1GA**, and David **VK1DJ**—seemed to be, as in previous years, the privilege of Victorian DXers and Divisional office-bearetrs, this time represented by VKs 3BG, 3TE, 3TF, 3UO, 3YS, 3ZC and 3AHH.

A well-known DXer in a much hotter area than Antarctica, Don **PJ2AJ**, in **Aruba**, has given the following very desirable information on active Amateurs in that country: PJs 2AA, 2AB, 2AC, 2AE, 2AH, 2AI, 2AJ, 2AK, 2AL, 2AM, 2AO, 2AP, 2AQ, and 2AR. Most stations QSL 100 per cent. via Bureau or direct. Don will be pleased to send another card to anyone who might not have received one from him. The PJ Club has a high reputation as far as prompt QSLling is concerned and the boys definitely intend to keep it that way!

These are interesting items supplied by the NCDXC and the "DXer":

VQ6LQ, who will return to VQ6 land in March, 1955, is ex-VI2BT, VU2NH, VU2DX, G3LQ, ZD1LQ and EL2LQ.

Operation from **ZD9** may be expected soon.

W6RRG should now be in **VP7 land** and intends to stay there for a year. He also plans a short trip to **HI land.**

W6MHB plans to go to **Cocos Island (TI9)** around the 1st February.

Following the Ballarat State Convention of the Vic. Div., the Divisional Council formed an **Olympic Games Committee** at the December meeting, with, for the time being, two members, namely VKs 3TE and 3AHH. Our main task will be the examination and arrangement of possible connections between this important international event in Melbourne in 1956 and Amateur Radio in general—W.I.A. in particular—e.g. care for visiting Amateurs, special QSL cards, etc., etc. Due to the close relation to the work as DX Editor, I shall answer all enquiries from Interstate and Overseas Amateurs and Societies in the normal course of such correspondence.

QTHs OF INTEREST

VQ6LQ—Box 11, Hargeisa, British Somaliland.
HK0AI—Victor Abrahams, San Andres Island, via Rep. of Colombia.
FQ8AX—Jean Rozier, Box 172, Pointenoire, Fr. Eq. Africa.
HZ1AB—7244th Air Base Sqdn. M.A.R.S., A.P.O. 616, c/o. P.M. N.Y., C.
LU3DCX—Alberto J. Michelin, Belgrano 320, Villa Alianza, Gaseros.
LU3JL—Angel Bugari, Irigoyen 583, Diamantel (E. Rios).
EL2L—Sam Butler, Monrovia.
ZB2A—Via ZB2I or R.S.G.B.
Ex-TI2TG, K6INI—Tom G. Gabbert, 1243, E. Meta St., Ventura.
DU9WX—Box 12, Iligan City, Philippine Islands.
ET3GB—Box 621, Addis Ababa, Ethiopia.
VP6GN—Public Works Department, Barbados.
ET2TV—C/o. Kagnew Station, Asmara, Eritrea.

ACTIVITIES

3.5 Mc.: Well, I am on my own again! **3AHH's** log shows **DL3TG (1830z).**

7 Mc.: Laurie **2AMB** presents this excellent list: KR6SA*, YU3IC*, IT1TAI*, IT1ZWS*, G6ZO*, LU9YG*, KB6AQ*, ZD6BX*, VS2CR*, JA*, KL7*, DU7SV*, DU9WX*, and KC6CG. Gordon **3XU** reports long-path Ws* around 2000z. Ken **7KM** worked JA*. Eric **BERS195** heard CT1CF, DL1DX, EA4BH, GC3KAV, HB1MX/HE (2015z), I1ACL, YU3BC, SM, 8CWC, 8CST and 8CPA (all aboard H.M.S. "Aelswabben"), HB9PS/MM (M.S. "Romandie").

14 Mc. C.W.: Lyell **2GW**: ZD6BX*, ET3S*, and FB8. Pete **2PA**: VK1PG*, ET3LF*, VQ2DT*, VQ4FK*, VU2*, VS6*, VS1*, YU*, ZD6RD*, MP4BBL*, KL7*, KC6UZ*, FK8*, JA*, Gs*, DLs*, LA4RD*, SM*, GI4RY*, OH*, OZ7UU*, OE1GZ*, ET3GB*, KA*, VQ6RO*, YV5EC*. Frank **2QL**: CE0AD*, ZD6BX*. Don **2RS**: DL*, SM*, I*, HB9X*, OZ7SN*, DJ*, HA5KBA*, VS6*, GI4RY*, GM2QI*, VS5KU*, VS1*, ZS2BJ*, PA0QF*, OE2HP*. Barry **2AAB** FA8RJ*, DM*, 4X4BT*. Noel **2AHH**: OZ2N*, HB9OQ*, HB9PF*, F9QV/FC*, FK8*, FB8BR*, ZS6AMN*, DJ*, ZS5U*, ZS5AM*, FR7AA*, ET3LF*, ZD6BX*, VQ4BNU*, FA8SB*, FA8RJ*, EA8AY*. **2AMB**: CE0AD*, CP3CA*, LU1SE*, VK1EG*, DU1CV*, VQ6LQ*, VS6*, VP6CJ*, CE3QW*, VQ4EZ*, VS5KU*, 4S7NX*, VK1PG*, VK1DY*, P9BM*, SM*, OH*, LU7GP*, LU8EN*, VR3A*, VR4RO*, GM2FHH*, PY1MK*, CT3AB*, ZD6BX*, CE4DZ*, and MP4BBL, MP4QAH, OD5LJ, VQ6LQ, ZB1TA, HZ1AB, VU2, VQ4AG, VQ3CF, FB8BR, ET3AB, XE2KW, CE3QW, FI8AU, ZS5BF, FA8RJ, JZ0DN. Neville **2APL**: HS1D*, FK8*, and HA5KBA, ET3Q. Alan **3CX**: ZD6BX*, FO8AB*, VQ6LQ*, VR1RO*. Allan **3HL**: VS5KU*, Gs*, LA3HA*, LA4RD*, SMs*, ON4FQ*, KP4JE*, KP4AZ*, VR3A*, OHs*, VP6KL*, MP4BBL*, KV4AA*, HB9MO*, DLs*, EI9Y*, VS1*, VS2*, GI3GQA*, OZ5KQ*, FI8AO*, AP2Q*, PA0QF*. Eric **4EL**: SM*, G*, HB9*, OH*. Bob **4RW**: VK1DY*, VK1EG*, VS5KU*, ZS1PL*, FB8BR*, OQ5PU*, EI9Q*, LU3DAB*, YU3BC*, VQ3CF*, ZS6IX*, OQ5CP*, VS1*, ZS6WS*, VQ4BNU*, VQ4EZ*, ET3GB*, ZE4JE*, ZD6BX*, ZB1CH*, CT3AD*, GI4R*, CR9AF*. Doug **5BY**: ZD2DCP*, FF8JC*, VR3A*. John **5HI**: VQ2W*, DU1SCS*. Rob **5RG**: DJ*, VS6*, DL*, VU2*, VQ2EZ*, GI4RY*, OH*, G*, SM*, JA*, OD5LJ*. Ray **5RK**: HS1D*, DU1CV*, JA*, F8*, OH*. Austin **5WO**: HZ1AB*, DJ*, LZ*, HA5KBA*, MP4QAH*, YV5FV*, LU8EN*, VS5KU*, CE4AD*, AP2Q*, OE2HW*, FR7ZA*, ST2GB*, KP4AZ*, OA4ED*, OZ7BG*, ZS1RG*, ET3GB*, OD5LX*, G*, HB9RX*, HB9MQ*, ET2US*, MP4BBE*, F7DO*, CN8IB*, KV4*, EA4CE*. Doug **7DZ**: HB9*, OE*, KP4AZ*, AP5TM*, SM*, ST2AC*, VQ8CB*, OD5LX*, ET3GB*, GI4RY*, PA0*, VR1RO*, SV1AZ*, YU1FC*. **7KM**: VR3A*, VR4*, VS1*, VS5KU*, VS6*, CR9AF*, XE*, KP4*, KV4*, VU2*, LU*, CT1*, SM*, OH*, DL*, OE*, ON4*, PA0*, GI*. **BERS195**: CE3RE, CT3AB, DU1VQ, ES1D, FK8, FO8AB, HC1FG (0700z), HS1D, KA9, KP4AZ, KR6, KV4, LU8EN, MP4BBL, OD5LJ, VK1DY, VK1PG, VK1EG, VR3A, VR4RO, VR2AS, VQ2LQ (1430z), VR2, VS1, VS6, SM8CWC/MM.

14 Mc. Phone: **2PA**: ZC5R*, ST2DB*, OQ0DZ*, VQ3RJB*, FA3JY*. **2RS**: OA3C*. **2AAB**: ZC5VR*, KA0IJ*. Ted **2ACD**: 4S7*, KA*, VS2*, Gs*, KC6ZB*, CN8*, OH*, VU2*, F9*, PA0*, EA3GF*, DL*, HG9J* and YK1AA. **2AHH**: VQ4ERR*, VQ4EU*, 4S7SS*. **2AMB**: VK1PG*, VK1DY*, CO2BL*, ZS5PG*, ZS5DE*, CE3HL*, CE3QJ*, OH*, VS2* and VQ4EK. ZS1SW, ZS4GK, ZS5U, ZS5JM, OA2A. **2APL**: KA*. Ken **3CW**: ZB1*. **3HL**: DL*, SM*, VS2*. Stan **3TE**: CM9AA*, DL*, DU1YQ*, EA2*, EA3*, EA7*, EI2W*, ET2MZ*, F3*, FI8BB*, G*, GW3FYI*, GW3EQL*, HB9GS*, HZ1AB*, HZ2AEH*, KA0IJ*, KA*, KC6UZ*, KC6ZB*, LU4BW*, MP4BBL*, MP4KAC*, OA2A*, OE1WH*, OE2SP*, OQ0DZ*, PA0NU*, VE*, VQ3RJB*, VQ5EK*, VQ6LQ*, VR2*, VR3A*, VS1*, VS2*, VU2*, XZ2ST*, YU1AD*, ZB1EB*, ZB1LG*, ZC5VR*, 4S7PJ*, 4S7YL*, 4S7SW*, 4X4s*. Fred **3YS**: ZM6AT, VR2. John **3AKO**: OH*. **4RW**: VR3A*, ZP5CG*, ET2MZ*, ZD6RD*, KC6ZB*, CE3PV*. **5HI**: ZS1SW*, KL7FAF*, KG4AP*, CE3QJ*, 4S7YL*, GD2FRV*, YV5DL*, KB6BA*. **5RG**: HZ1AB*, VU2*, DL*, 4S7YL*, OH*, OZ7UU*, 4S7FW*. **5WO**: LU7AAT*, MP4BBL*, VQ6LQ*, DJ*, 4X4DK*, DL*, HB9J*, 4X4CX*, CN8EE*, 4X4FV*, MP4KAC*, EA3CY*, CT1CT*, VU2*, HB9JW*, 4S7YL*, ET2MZ*, YI2AM*, YV5FK*, CT1FY*, VS2*, CN8MZ*, EA9MZ*, EA9AR*, FA3ZH*, OA2A*, VP6GN*, KP4AZ*, ZB1DK*, KA*, KG6*, VQ3RJB*. **7DZ**: 4X4FV*, EI4X*, MP4BBL*, YI2AM*, KG4AP*, KG4AF*, ET2MZ*, KP4WD*, DU1ES*. **BERS195**: CM9AA (0315z), DU1AP, KA0IJ, KG6, KV4, MP4KAC, OQ0DZ, VS2, 5A3TF (1400z), W4VVU/MM (S.S. "Pioneer Reef"). **Jim Hunt**: CT1FY, PA0NU, SU1AS, SU1CX, OE13WD, OE1WH, AC3PT, AC3SQ, YK1AA, MP4BBL, HZ1AB, PI1J, HS1WR, 4X4s, SV0WP/MM, F8, YU, ZC4JA, HB9JW, ZB1LG, OH, ZS1SW, DL, HZ2AEH, VQ8CB, VQ5ER, VQ5EK, VQ6LQ, VQ3RJB, CN8EE, CN8MM, VQ4FF, VQ4EZ, VQ4AQ, VQ4FK, ZE2KI, 5A2TZ, 5A4TR, 5A4TU, ET2US, ZS6OY, XS6TE, EA2CY, EA2CQ, VP6GN, VS6, 4S7YL, VP2KM, CX2CO, LU6AJ, PY2CK, Gs, FK8, VS2, FI8BB, VK1PG, KR6, VU2, VE.

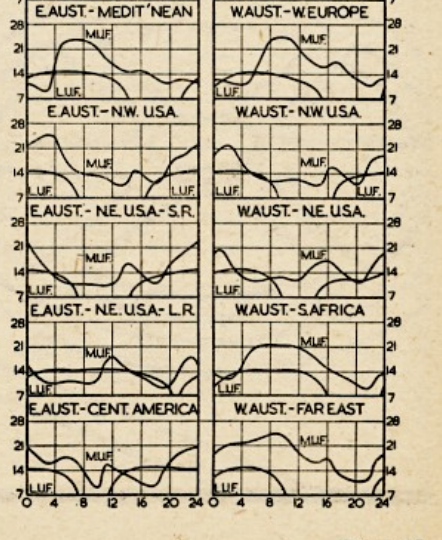
21 Mc.: **2AHH**: JA3JM*, Noel **2AQH**: CE2*, KM*, HP3FL*, 4S7YL*. **4EL**: 4S7YL*, KW6*, KA*, KC6ZB*, KL7BFW*, CE3EO*, KG6*, JA*, VS1*, HC1FS, W2JAC/MM*, W4VVU/MM*, PY2CK*, G8SY*, G3HCU*, G3BXI*, OH*, VS6CZ*, 4X4BX*, ZS2AL*, SV0WM*, PA0VN*. **4RW**: 4X4CW*. **5WO**: HC1FS* (0230z), VS1FE*, 4S7YL*. **Jim Hunt**: Gs*, 4X4DK, SV0WO, OE1WH, DL, PA0ALO, VU2, VS1FE, 4S7YL, DU7SV, KW6, KA, KX6, KJ6, HC1FS, PY2CK, ZS5NJ, VQ4VL and Ws.

27-28 Mc.: Short-skip signals to all **VK** States and ZL land were reported by Norm **2ALJ** and **Jim Hunt.**

Rare QSLs were received by: **2QL**: IT1TAI. **5WO**: MP4KAC, OD5AB, KT1WX, VQ6LQ, HK3PC, HP3FL. **BERS195**: VK1EG, VQ4CUR, MD5AK, HB9IX/MM, W4VVU/MM.

Thanks to the Northern and Southern California DX Clubs and their Bulletins, PY2AJ, VKs 1DY, 2GW, 2PA, 2QL, 2RS, 2AAB, 2ACD, 2AHH, 2ALJ, 2AMB, 2APL, 2AQH, 3CW, 3CX, 3HL, 3TE, 3XU, 3YS, 3AKO, 4EL, 4RW, 5BY, 5HI, 5RG, 5RK, 5WO, 7DZ, 7KM, and s.w.l's. BERS195 and Jim Hunt.

PREDICTION CHART FOR FEB., 1955



† Hans J. Albrecht, 10 Belgravia Ave., Box Hill North, E.12, Vic.
* Call signs and prefixes worked.
z — zero time—G.M.T.

FEDERAL, QSL, and DIVISIONAL NOTES

FEDERAL

DX C.C. CERTIFICATES

Interest in the competition re the designing of this Certificate has prompted inquiry as to what is required in the matter of wording.

On the old Certificate the letters "DX C.C." were overprinted with the words "Wireless Institute of Australia." This was followed with "Certificate of Award granted to ..... on having established two-way radio ..... communication with one hundred countries," together with spaces for signatures of Federal President, Federal Secretary, Date of Issue, and Certificate Number.

T.V.I. BOOKLETS

Many members have already sent for and received the latest edition of Remmington Rand's informative book on T.V.I. Executive were fortunate in obtaining a generous supply of these books with the result that they are still available. However the number is limited. Members desiring a copy are requested to send a letter to the Federal Secretary together with 7d. in stamps.

DX C.C. MANAGER

After many years of sterling service the DX C.C. Manager, Geo. Morris, VK3BZ, has indicated that he wishes to relinquish his duties.

Many members who have obtained the coveted award of DX C.C. are indebted to Geo, who has had to carry out the necessary checking and arranging for certificates.

In view of this forthcoming resignation, Federal Executive is looking for a successor to Geo. and those interested are referred to the announcement in another part of this issue. Here is a splendid opportunity for some interested person to carry out a very worthwhile and informative undertaking.

HANDBOOK FOR OPERATORS OF AMATEUR WIRELESS STATIONS, 1954 EDITION

The Amateur Administration has announced that the 1954 Edition of the Handbook for Operators of Amateur Wireless Stations is now available from the office of the Administration in Melbourne, or from the Superintendent, Wireless Branch. in the various States.

This book is prescribed for examination purposes and many members will be interested in it for this purpose. Besides this, paragraphs relevant to Limited A.O.C.P. are now included.

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FEDERAL QSL MANAGER

RAY JONES, VK3RJ, MANAGER

The Junta Central Fallera, Valencia (Spain), official bureau for the world's most famous Festival of Art, has organised, together with the U.R.E., a competition to be staged between 1st November, 1954, and 31st January, 1955. The contest consisted of communicating with EA5 stations situate in Valencia. Diplomas and badges will be awarded to the winning stations. For stations situate in Oceania, a minimum of two contacts were required before an application for an award could be made. Applications for awards together with confirmatory QSL cards must be made to U.R.E., Apartado de Correos No. 3, Valencia, Spain. Like most of the contests staged by European countries, the particulars were forwarded by surface mail and did not reach here until the contest was almost over.

News from Bill Storer, VK1EG, as at 23rd December. Bill had run up a total of 105 countries to that date. Shortly before Xmas, Bill had the misfortune to get his right hand squashed in the hydraulic system of a tractor. Fortunately no bones were broken, but the injury was painful and necessitated Bill sending his official traffic with his left hand—a slow, painful and laborous undertaking. The injury also kept him off the Amateur bands for a period. He is looking forward to his return to VK and to his impending marriage. Reckon Roy 4FJ should loan Bill his new Mark VII. Jaguar for the honeymoon—it's just a suggestion, Roy.

Chas VK1AC, now back in Australia, speaking to the writer from Macquarie a few days prior to his departure, expressed his disappointment at not making the 100 countries. Chas had run up 86 to that stage, but despaired of adding to the total before he left. Take heart, Chas, many knowledgable DX men during their stay down there could only manage much less. Bill Storer, when VK1BS, could only manage 68. Southern Europe, the Mediterranean, Northern Africa and South America are particularly difficult to QSO from Macquarie.

The following gratifying letter has been received from Ray Herbert, 3A2AL/VS5KU/G2KU. I quote: "For the last few weeks I have been operating VS5KU, from the Shell Co. Rest House at Seria, Brunei. The station has now been closed down as I return to England today (22nd December). Operation has been on 14 Mc. c.w. only and about 280 VKs and ZLs have been worked, the contact being a new country for most of them. Due to air travel, the gear had to be very simple. The rx is the size of a box camera, and weighs under 2 lb. It is a four-tube superhet. The tx is on a QSL sized chassis and ran at 20 watts; weight, 2 lb. The VKs and ZLs worked were very well behaved indeed, never calling out of turn and always ready to help with information of other DX calling. QSLs will be sent out in February on a one for one basis. QSLs to me should go to R.S.G.B., or direct to the call book QTH of G2KU: 9 Baldwin Avenue, Eastbourne, Sussex, England. Please pass on my thanks and 73 to all for many pleasant QSOs." Quite a pleasure and a refreshing change to receive such letters and am glad to have been numbered one of the 280.

Have enquiries as to whether any cards have been sighted from VK1AF and VK1RL, but must answer in the negative. However, I do not see many of the outward bound cards.

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NEW SOUTH WALES

The December monthly meeting of the W.I.A. (N.S.W. Div.) was held at Science House, Gloucester Street, Sydney, on 17th December, 1954. The President opened the meeting on time and after the usual introductory features, the President outlined the objectives of the Division and reported on the work which has been done. A detailed report on the scheme to acquire a home for 2WI was outlined by the Secretary, who also reported on the work done by the committee of which he is the chairman, and we feel that most members were agreeably surprised at the amount of work which these gentlemen have put into this project. A motion was passed empowering the committee to proceed with the negotiations in hand and to report to Council from time to time.

The Adams Cup was presented to the winner, N. Southwell, 2ZF, and all were pleased to see this Cup presented to him for the second successive year.

The lecture for the evening followed, delivered by Noel 2ZF, his subject being Single Sideband Exciters. Noel made his lecture interesting and informative, delving deeply into the intracies of the technique, and finally convinced many of the attentive audience that s.s.s.b. transmission had many advantages over the technique more commonly employed. The vote of thanks was moved by the President and carried by acclamation.

Owing to the holiday atmosphere at present prevading the whole State, we have no reports from correspondents this month but hope that the coming weeks will show a change for the better in this regard. The main gleanings from all bands this month appear to show that all had a good Xmas and it appeared that most of the chaps really enjoyed themselves.

The Broken Hill gang are really getting organised. Dudley 2DQ has put in some fine work with his s.s.s.b., and running the full five watts really gets around. 2ALL and 2AYS have been busy indeed, the hot weather frequently forcing them to peregrinate to the more congenial air-conditioned building down town, but nevertheless they do put in a lot of time on the air. 807s have been the main topic. Jack has a nice 750 now and Lou, not to be outdone, has an AR7 which is doing a good job for him.

There will be a new call on from the Silver City in the very near future we hear, congratulations old chap. 2AHH from Kempsey is touring and we had the pleasure of a visit from Noel, Olive and family recently. 2AJQ (Bathurst) is on the air again and in between travels on official business will wear a track down to Sydney on 40 mx we hope.

Remember the coming Convention at Urunga, Easter week-end; book in as soon as possible with 2AVG or 2AHH.

SILENT KEY

It is with deep regret that we record the passing of:—

Arthur Tonge, ex-VK4AR.

VICTORIA

The next general meeting of the Victorian Division of the W.I.A. is scheduled for Wednesday, 2nd February, at 8 p.m. in the Radio Theatre of the Melbourne Technical College, when a lecture will be given by a member of the staff of the College.

80 METER TRANSMITTER HUNT

Bob 3OJ picked out a most delightful spot for the Xmas wind-up of the 80 mx tx hunt. The tx was hidden at "Heaney Park," some eighteen miles from Melbourne in the Ferntree Gully area. The Park itself was an excellent place for a picnic with tables and seats set under shady trees, hot water available and also had a huge swimming pool. Most of the children had brought along their swim suits in the hope of such a treat, but the only thing that Bob couldn't provide was the weather which wasn't the best as it was showery on and off most of the afternoon, but this didn't dampen the spirits of the tx hunters by any means. Six equipped cars started from the assembly point where Syd 6SJ, who was touring Victoria, came in to have a word with the gang before they started out.

Bob 3OJ, the hider of the tx, used a half wave doublet aerial supported on gum trees twenty-five feet high and supported in the centre by his 2 mx antenna with a co-ax feed line coming down the inside of a tubular steel mast. The overcast conditions and low cloud ceiling played tricks with the signal, resulting in the fact that every one of the competitors had to open their sealed envelopes. Bob hit on a good idea in regard to the sealed envelopes by writing the directions on one side of the paper and sealing this down, then on the other side of this folded sheet he gave a bearing with the words—"proceed in a south easterly direction"—then folded this over and sealed it down, so that if a competitor lost the signal he could open up the first section and proceed in the direction given until he picked the signal up again. However, even this little clue was not enough this time and once again the tx has won. Eventually all the competitors arrived at the location with the exception of Eric 3ADU who managed to get himself into a spot of trouble.

During the past two years, 80 mx tx hunters have seen a considerable amount of the countryside of Victoria and found out what lovely spots there are if you only go a-hunting. In all, 26 attended the hunt which concluded with a picnic tea during one of the brief spells of sunshine. What about building some 80 mx receiving gear and come along and join in the next hunt.

The next Tx Hunt will be held on Sunday, 13th February, 1955.

CENTRAL WESTERN ZONE

Pleased to see that a call sign has been allotted to Keith Temmler, 3ATS, of Murtoa, a big welcome Keith. Many had the pleasure of f.b. contacts with Chas 1AC on Macquarie Island. By the time these notes go to press, we will have welcomed Chas back to these parts where he will be doing some hoilday relief at a local broadcasting station. 3AFO has been busy building a high powered rig using 807s in the final and employing super modulation; hope she performs to your expectations, Merv.

Byron 3TA has erected a new set of rotary beams for 20 mx and 2 mx and according to reports they are working satisfactorily. Trev 3ATR and Herb 3NN have been busy with harvesting operations, but still manage to get on the air occasionally. They often work the Horsham boys on 2 mx with good signal strength. Jim 3DP and Keith 3AKP have also been active on the 2mx band and at present are doing a spot of re-building to their respective rigs. Bob 3ARM was on the air recently after a couple of months re-building and seems to have made an excellent job as his signal was f.b. Heard that Allan 3HL is now rapidly improving and will soon be

100 per cent. again, sorry to hear that your son and daughter have also been on the sick list Allan, sincerely hope that the New Year brings you all back to normal health.

NORTH EASTERN ZONE

Stan 3AGT is heard on the bands from time to time and Frank 3ZU was reported to be testing a new n.b.f.m. all-band tx a while back. Henry 3HP is now well wound up on his VL3 Fire Brigade network, and probably Des 3BP is using his spare time to good effect helping him; incidentally, the impression is that is where Ron 3AQG spends some of his radio time too. Howard 3YV was one of the interesting people Ken 3KR met at a social function at Benalla a while ago. It is understood that an Amateur who hopes to make a welcome appearance in the zone is Bruce 3QC.

One of the bright spots in January "A.R." was that article by Jim 3JK on the conversion of the BC series txs to the various Amateur bands. Also in the January "A.R." was a short and interesting article by Les 3ALE. The Editor can still use some more if anybody is interested in writing up their pet equipment.

Jack 3AKC was reported to have enjoyed himself on the Mt. Stanley venture mentioned some issues ago. Vic 3ABX was on the track of a good communications rx recently, while Jack 3PF is reported active on his Rural Fire Brigade net. Lex 3AIL is building a converter to work his AR8 on 21 Mc., and Hugh 3AHF is heard of from time to time. Alan 3UI was recently hard at work on his new v.h.f. equipment, and Syd 3CI was wading into the 6 mx openings. Keith 3JC must be sticking to the 20 mx DX. Although little is heard of Johnny 3ACK, Murray 3HZ was written up in the provincial news-sheet reporting on the opening of the improved operating facilities at the local Commercial BC station.

A very interesting hour or so was put in recently while Des 3CO detailed the working of a communications installation, amongst other things it was learnt that Doug has been allotted the call sign 7IJ. Chas 3ACW was seen at a distance recently, and again from that provincial news-sheet, Alex 3AT and his XYL are receiving congratulations on the arrival of a harmonic, Ross. Col 3WQ is heard on the air quite regularly, but the same is not reported at the moment of George 3GD and Tom 3TS. However Peter 3APF and Brian 3ASF are both heard of indirectly. It is thought that Clarry and Vern are still "on deck," as is Jim, but nothing has actually been heard of our Associates just recently.

EASTERN ZONE

There has been quite a bit of activity of late. Joe 3TO was heard testing some new equipment recently, Ron 3PR has been on the air over the holidays, but believe he was not feeling quite his normal self, hope you are OK now OM. Doug 3ASE and XYL were last seen heading towards his old stamping ground at Inverell in VK2. Jack 3FK and family set out for Adelaide, not only to run the new Velox in, but also to collect a long awaited AR88 coming from G-land. Ossie 3AHK will most likely acquire Jack's S640 now, so let's see you go to it and work the DX Ossie, you only need to work another 99 countries for the DX C.C.

Leo 3SG is very quiet, nor has Arthur 3ABF been contacted for many moons; guess he is too busy keeping the local ABC rig going. Bill 3TY, at the opposition station, is on the bands when time permits.

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QUEENSLAND

If you know of anyone interested in the Listeners' Group, which will hold a meeting in February, please contact the Secretary or pass the information on to the persons wishing to join.

This Division would like all members to submit ideas for the proposed holding of an Annual Convention to the Council for consideration. They hope to piece something together from your ideas to make it a successful event, so everyone will want to come again. What about it chaps? Let's have them.

The Xmas get-together went off very well with some 30 there, but it was surprising how long it took to dispose of the liquid refreshments and some three persons were left around the wee small hours looking after the little that was left, while the philosophising by them was long and varied. An extra good get-together, and hope to see more there next year.

It is coming around to the time when we should be giving thought to the new Council. The old Council has been on the job for many years now, so what about giving considerations to what sort of a job you could do to put the Division in the fore-front of affairs again. There is certainly a job for your talents instead of leaving it to a few to carry the burden. We find most of the Council at present have several duties to perform and would welcome the chance of shedding some of the load. So please, your nomination!

Well chaps that's all, holiday time is not conducive to writing. See you at the meeting.

It is with regret that we record the passing of Arthur Tonge, ex-VK4AR, who was prominent in W.I.A. affairs pre-war in Queensland. He was a member from early 30's to 1939. The Division extends their deepest sympathy to his relatives.

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SOUTH AUSTRALIA

The VK5 Division of the W.I.A., the Division which is always on the ball, held its monthly general meeting for December in the club rooms and as is the usual practice it took the form of a Xmas Get-Together. More than a hundred members and visitors came along armed with loads of goodies and the spirit of Xmas, and a jolly good time was had by all. Naturally very little business was transacted and the main entertainment for the night was provided by Associate member Geoff Smith, who gave an illustrated talk on his recent trip by caravan to Mt. Buffalo. Geoff excelled himself in his talk, both from the excellence of his coloured slides and also from the amount of information he conveyed concerning the trip without talking too much. He concluded his talk with a selection of slides taken at the time of the visit of Her Majesty the Queen, to Adelaide. "Doc" 5MD, in his speech of thanks, summed up the opinion of all present in a few well chosen words, and the prolonged applause at the close of the vote of thanks was clear evidence of the success of the talk.

A short "smoke-oh" followed the talk and this gave the Council members a chance to set the tables with the goodies and the liquid refreshments ready for the combined attack of the members. At a given signal the members lined up and made a combined attack on the tables, and for a half-an-hour or so no sound was to be heard but the steady munching and crunching of the members' jaws as they did

their best to make the tables look like Mother Hubbard's cupboard. It goes without saying that they succeeded beyond their fondest dreams, and at the conclusion of the feast it was impossible to find even a crumb on any part of the tables, which speaks volumes for the appetites of the members and also for the quality and quantity of the goodies brought along by the members.

Once again it has been proved beyond any doubt that this type of Xmas Get-Together every December meeting is just what the members want and the splendid attendance of members plus their obvious enjoyment with the goodies and the rag-chew, means that the Xmas Get-Together has come to stay. Members of the Council deserve every praise and thanks for the way in which they carried out their individual duties, and can sit back and feel well satisfied with their efforts in the 1954 Xmas Get-Together.

Among the welcome visitors were Messrs. R. Sedunary (5KS), C. Moule (5CX), R. Grundy (5BG), D. Tacey (5DW, ex-3DW), W. Beaney (5WB, ex-4BV), and of course John Clifton (5HI). We hope that all these gentlemen enjoyed themselves and we also hope that we will see them at future meetings, although of course John 5HI can only manage to attend the Xmas meeting due to the difficulty of transporting him to and from his QTH. Incidentally, this transporting is usually handled by "Doc" 5MD and Ken 5KC in the usual Amateur spirit, and our thanks go to them for the gesture.

As chief steward, it was my duty to keep the liquid refreshments flowing and it was whilst carrying out this welcome duty that I hatched my little plot to clear the 20 mx band of VK5 signals the following night, and thus work myself some DX. I put aside in the kitchen all the strawberry sponge cakes, all the iced fancies, all the cream cakes, in fact anything that would come in handy to hand round at the conclusion of the feast to all the well known DX men, in the hope that they would be so indisposed next evening that the said DX would only have me to come back to. Well, did I fill them up? By the time that I had been around three or four times to these jokers, the mere sight of me appearing at the kitchen door was enough to turn them green at the gills, and finally to tempt them further it became necessary for me to have a nibble or two at the iced fancies, etc., just to show them that all was on the up and up.

The DX was extra good the following night—but I only heard secondhand, because the doctor advised me to stay in bed for a day or two to get over my billious attack, in fact he said that if I did not do as he advised, my fallen chest would remain in that state indefinitely. (Wonder if the doctor was a DX man?—Ed.) Just goes to show how low these DX men will stoop to block me, filling me up with cakes, knowing how weak and delicate my stomach is. Anyway, I bet I had a few mates!

Quite a number of regulars did not put in an appearance at the meeting and I heard later that the reason was that members of their families were laid up because of colds, etc. We hope that all are well now and we were sorry that you could not come along, nevertheless we will be back in the same spot next year and then you can come along and make up for the good time that you missed this year.

SOUTH EAST AREAS

The first news of importance from the South East, as far as I am concerned, is that I have a new correspondent for the monthly notes in Stuart 5MS, Colin 5CJ having apparently thrown in the towel. I trust that it is not because I have been such a slave driver in the past, Col, but anyway you have done a good job for many years and I sincerely express my thanks for all your help. Hope that you and yours are in the pink.

5KU and his XYL, in other words, Erg and Joyce, had the best Xmas present in the world this year in the form of another bonny bouncing boy, and all are doing well. It has not stopped Erg from continuing his c.w. activities because he reports several new countries added to his list this month. He has been tinkering around with his beam a little but cannot see any change in the results. 5FD has been noted as being a little more active in radio and reports that the family are progressing very well. Apart from a few fireworks on Guy Fawkes Day from his electrolytics, John finds everything working well. It is to be hoped that a few more hot days will come along soon because it would appear that John only comes up on the air when it is over a century.

5CH is still building his shack; what a shack it must be, he has been on that shack for the past four months; it certainly cannot be a little shack!! Anyway, Claude is still finding time to build up some test equipment and the examples of his work which were displayed at the monthly meeting of the S.E. boys spoke for themselves in no uncertain manner. Will we be seeing you down here soon Claude? For one exciting moment, when I glanced at Stuart's notes, I thought that John 5JA had at last been heard on the air. However, on second glance, I find that he will soon be starting on a new business venture and therefore will have even less time for activity in connection with Amateur Radio. Oh well, I can only hope and pray.

5TW is listed among the missing this month and it has even been suggested that he was an absentee from the monthly meeting because the tea and sugar subs. were due. Speaking for myself, and knowing Tom as I do, I refuse to believe this libel and can only thing that he has been so busy at his vocation that he has had no time for anything else. As a fellow worker in the broadcasting game I know just how busy one can be. Ahem! 5CJ, if all reports can be believed, thoroughly enjoyed himself at Xmas time, but Xmas time or not, Col managed to be heard on 40 and 2 mx at times. Leo Magrath (is that spelt right Leo?) now has his limited ticket and hopes that a number of the boys will be active on 2 mx to give him his chance to do some experimenting. I think it will be a certainty, Leo.

From Naracoorte comes the news that Brian Gellet, of Hynam, also has his limited license and is hoping to take the extra license in March, but harvesting activities are proving a bit of a stumbling block. Associate member Jack Fowler is fully occupied with bushfire radio work this time of the year, as is 5CJ, 5JA, and many others in the district. 5MS has been operating mostly on 40 and 20 mx, although he did put in an appearance on 15 mx using his 80 mx antenna for that band. I gather that Stuart was most active over the Xmas period dodging the XYL who seemed to have the most peculiar ideas as to how to spend that period of the year. It goes without saying that she eventually caught up with him and persuaded (the word is mine!) him to build a new front fence, although he managed to contact two new countries in between. I also note that he has been doing a good bit of testing his equipment with an audio oscillator and a c.r.o. and managed to find quite a number of things that do not show up on the air. I did some testing along the same lines once, but gave it away very hurriedly when I saw just what was living inside my modulator. As for what was in the tx, well, only a crayfish and beer supper could produce such a revolting collection of animals. Never do it, Stuart, leave well alone!

Several visitors called in at Mount Gambier over the Xmas period and included Syd 4SE, who stayed around for the best part of a month, and also Bill 3BL who was around for the New Year period.

By the time that these notes are being read it is hoped that the R.D. trophy will have been on display at Mt. Gambier during the week that it will be proclaimed a city and also that the two boys that made such a grand showing in the contest will have been given the publicity they deserve. Naturally I refer to Stuart 5MS, who did so well in the phone section, and also Erg 5KU, who held more than his own in the c.w. section. We salute you boys.

At this time each year in the magazine I usually apologise for not being able to answer all of the Xmas and New Year greeting cards that find their way into my tent, much to the annoyance of my harmonic and the XYL, who have never been able to see my fatal fascination for the members of the opposite sex. The real reason for my inability to reply to them all is the fact that my £3,000 a year salary is usually in a decidedly sick state at this time of the year and I only have my salary from the magazine to splash about on greeting cards, etc., etc., and of course that does not go very far (compilation department, please note!). [Being a semi-skilled journalist, we are raising your salary 1¼ times—Ed.] However, I do appreciate the good wishes and can only think that if you are all fair dinkum about these notes, then you must all be as weak in the scone as I am. To those Amateurs who so correctly summed me up and sent me greeting cards which should have been packed in ice, I also say thank you, but I have a team that will lick yours any day; to the XYL of Jim 5FO, many thanks, but do I really remind you of that quadruped, and did you have to wish me "better thoughts"? To the devoted pair of readers from Geraldton, also many thanks and spare my blushes, and last but not least, thanks again to all who used the Xmas period as an excuse to have a shot at me. After all, if I expect you fellows to take it in the spirit with which it is dished out, then I must do the same. Off the record, I lapped it up!

Wyk 5WM announced his engagement this month and of course has had to put up with ribald remarks and suggestions. He has not introduced me as yet to the lady of his choice, and if the truth is to be known, does not intend to do so. However, if he thinks by doing this that his intended will not learn the dreadful truth about his evil smelling pipe, then he is in for a shock, because if necessary I will bottle a sniff or so of the smoke (flattering name) and send it to her as my share of the Gypsy's warning. POOHHHHHH!

Quite a number of Amateurs visited the city of culture and high ideals (Pincott please note) over the Xmas period and included Ray 3ATN from Birchip, Leo W2JAC (of the Pioneer Glen), Cliff W6 (of the Sierra) and also Les Fiedler (ex-5SL and now an electrical contractor 50 miles or so from Perth), who was passing through to VK3 on a holiday, after an absence of twelve years from Adelaide. It was good to see these follows, and Ray 3ATN gladdened my heart considerably by telling me that he had found his soul mate in VK5 and might possibly in the future have a VK5 call sign. Another deserter from the cause of Pincott, my propaganda is at last reaping results.

Due to the absence of quite a lot of the local boys on holidays, etc., I have not been able to gather much news of interest and naturally am finding it difficult to keep the VK5 column for this month representative of such an exalted Division of the W.I.A. I could perhaps pad these notes a little and thus keep up the good name of the Division, but never let it be said that Parsons sank to such a low level as to pad in order to keep in front. Nevertheless and notwithstanding, but mostly with sitting, if there are any Amateur gardeners among the boys who need any advice as to how to grow vegetables, flowers, etc., then write to me, I am an expert. This year has been my most successful year of all time. Not a thing came up in the garden and my XYL is thinking of taking the said garden over. What better results could you get than that. I ask you!

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WESTERN AUSTRALIA

The Christmas meeting of the Division took the form of the usual social, and many were the yarns swapped about that new rig, the DX that got away, etc.!

In one of his Sunday morning broadcasts from 6WI, 6GH pointed out the threat of t.v.i. which hangs over our heads with the advent of television broadcasting in this country. It may be a couple of years away for VK6 as yet, but now is the time to get to work and get rid of excessive harmonic radiation from the rig which may possibly be the cause of future trouble. Even t.v.i. proof rigs can give trouble though, can't they Tom!! Anyway, there's going to be quite a lot of re-building necessary, and yours truly is going to be right in the thick of it.

6KO, from Merredin, paid a visit to the City early in January with tidings of proposed v.h.f. activity in the wheat-belt Merredin-Bruce Rock area with 6DW, should be a good thing for a start OM. Nothing heard yet on the bands of 6QO, but time alone will tell. It's about time that super pro did some work, Frank. 6OR having a little difficulty rotating the beam at present; did I hear you say the tower had sunk at one corner Jack? Looks like a job for a jack or some such.

6DX was another country visitor and dropped in on 6BO on the way through. During short skip bursts on 14 Mc., both Bill and Bernie, 6KJ, of Albany, have been coming through in fine style. 6EC has his camera tube operating—this time with a positive picture and resolution very satisfactory. Next project is the installation of a proper receiving tube to replace the 5BP1..

While down in Perth during December, 6WG witnessed some of the QRM experienced by the 70 Mc. taxi stations from Sydney and Melbourne services. I am told there is no truth in the rumour that Wally got on the mike and called CQ DX! Sid 6SJ was heard from 3ATN during the month, working back to 6GU at Fremantle, who will be tied up with a shift of QTH to Manning Park shortly. Have to get the construction gang on the job of lowering the tower John.

6AP dropped in the other day to say hello and to demonstrate some of his tape recordings —not of Amateur transmissions though! 6LT must have been stirred by remarks last month —or something. Anyway, heard stations calling him on 50 Mc. recently, so he must be on the air.

Have not heard 6AS about since the 40 mx scramble, although 7 Mc. conditions have not been exactly A1, so maybe that accounts for the apparent absence of a large percentage of country stations. 6LL has been heard on 14 Mc. from his new QTH at Victoria Park, which is purported to be much better than the old one. When does the beam go up again Clarrie?

— . . . —

TASMANIA

The notes for this month will be rather short owing to the fact that I have been out of touch with all matters radio since Xmas and am enjoying myself camping, boating and fishing with not even a b.c. set or newspaper to keep in touch. I confess that I did intend to bring along the 144 Mc. mobile rig, but that developed a fault at the last moment and had to be left behind. Anyway the fish, food and weather are all fine and I don't intend to seek civilisation again until about 19th January.

The urge to get away from it all also hit 7LJ recently when he started out on a trek through the little known mountains of the West coast, but unfortunately it started to rain as he went out his front gate and didn't stop until several days later, so the trip had to be abandoned. Lon had dreamed up a nice little rx to take along just to keep in touch, but lack of time prevented it becoming a reality; perhaps next time Lon.

Speaking of dog-houses, which we weren't, but you never know, Doug 7DZ spent a most uncomfortable night recently so my spy reports. It seems Doug sat struggling in the shack until 3 a.m. waiting to work a VK1 and when the big switch was pulled and Doug staggered bedwards he found all the house doors locked and barred. Frantic hammering on the doors failed to make any impression and a most uncomfortable night was spent in the car—so beware you blokes, it does really happen sometimes.

The January meeting did not go so well according to the grapevine, and even grapevines can reach this rather remote spot. Apparently very few members attended and the evening was spent in looking around the bands in the 7WI shack and when somebody picked the lock on the supper cupboard, a cup of tea was enjoyed by all present. There was probably some confusion regarding which Wednesday the meeting was to be held and some members seemed to be under the impression that it would be on the second instead of the first Wednesday in the month.

Special QSL cards for 7WI operating portable from the Queenstown Exhibition several months ago will soon be sent out to all stations contacted. The cards were designed and printed by Lon 7LJ and have turned out a really good job, many thanks for a job well done Lon.

Bob 7AF is trying his hand with an electronic bug; does this mean an early comeback in the near future from the new location Bob? Joe 7BJ still struggling with a 2 mx rig and I am beginning to have doubts that it will ever work; the last I heard, the modulator was developing 2 mx oscillations, but the tx would not.

Well that's all for this month, anyway I've got to finish now because I've run out of paper. Ah well, life's a struggle, hand me that fishing line Mum!

NORTHERN ZONE

For several months Launceston Amateurs were laboring under great difficulties due to intense power line noise, which in some areas also blotted out test cricket broadcasts. Finally 7LZ and 7PF did some fine d.f. work and localised the noise at one particular street pole and advised the Hydro. A few days later the power supply authorities were able to clear up this annoyance. Since then 7LZ has been able to work 50 Mc. right and left. 7CA was home for Xmas but had a bad bout of 'flu. Max has now gone back to the Islands and has a Type 3 Mk. II. with him and is on the lookout for contacts.

For our last field day 7XW took zone president 7RK at his word, "that the world was wide open," and cleared off to Perth with his 2 mx tx. Believe it or not, Pansy, but 7GM ultimately located the tx. As these notes are being written, 7GM is still on the mainland completing his holidays.

On the 144 Mc. front there has been quite a lot of activity in preparation of the 1955 series of hidden tx hunts. 7BQ and 7LX are both building new tx's for mobile work, whilst Percy Woodroffe has completed a rx, with collapsible beam, for use on his motor cycle. Geoff Crompton has also been busy with a new beam for use in the car. Henry Solomon proposes to take the next examination and we all wish him the best of luck.

The December meeting concluded with a nice supper and it was so good to see so many present including 7CA and 7PM, the latter being temporarily stationed in Launceston.

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CORRESPONDENCE

LISTENERS

Editor "A.R.," Dear Sir,

Herein enclosed a few thoughts that may be of interest to the readers of "A.R." As a listener, these are my own ideas of the lot of the humble s.w.l., after discussion with other s.w.l's. I take time to jot down and submit to you.

At the time of writing, the pest of radio is basking in a few rays of well earned glory. A listener, to be called such, must have certain qualifications of patience, pride and perseverance rarely found in other species of "science nuts."

This fellow, not all kids, sits by his box of noise awaiting those magic words, "CQ DX! CP1, DL3, VK1, etc., calling and listening!" His clock has stopped, so a mad rush to find the XYL's kitchen timepiece ensues. Then as the "rarey" comes back the YF fumes through the shack doorway to demand the clock back to time that cake in the oven, and so the local QRM drowns out an S9 signal and you just sit and foam at the mouth. Who was that bloke talking to?

Sometimes the s.w.l. is more fortunate and logs CP1AM, 5-9 at 1306 G.M.T. in QSO with VK2BAD. After reading his mail, Johnny s.w.l. sits down at his desk and writes a report which goes into the mysterious QSL Bureau. Sometimes a verification arrives back. And so another country goes up on the board. Patience! You want miles of it to be a Short Wave Listener.

A listener's shack is a sight to behold. Cleanliness and tidiness prevail with well kept log books and records. The junk box even is carefully sorted and wire is rolled neatly. It's a pleasure to work in most places habited by these imps collecting data for free; tapping the mighty Amateur's brain. Pride of achievement and place rank the mail reader as tops in scientific research.

Research it must be, for how might the humble receivers used by the majority produce the results they do? Two valves, or even one, bringing in signals at S6 and S7 from the other side of the world are not uncommon equipment. Most times too, the components come from junked broadcast sets or from that fairyland of disposals where one may buy an AR7 for shillings or a dud condenser for pounds.

With a pair of hands, an active mind, and a will to better previous attempts, the s.w.l. presses on regardless. Noise, man-made and atmospheric; lack of interest by others who could help; lack of activity by Amateurs; and lack of thought by active Amateurs in relationships with these men who would rather put their ear in a speaker than chew a perfectly good xtal mike to ribbons; all make the lot of the s.w.l. a bed of very long thorns and one that only perserverance of fine quality can keep the interest alive and the succession of fine results.

Results are said to be proved in the eating of the pudding. Eric Trebilcock, BERS195, known throughout the world as a premier listener, must have some thoughts and ideas about reception that would help even some of our transmitting giants. F. H. Price scored 656 points in the R.D. Contest. Only 11 Amateurs bettered this score.

The listener of some standing is important to Amateur Radio and is dependent upon the verification of reports, more assistance from expert Amateurs, and more tolerance, for his experiment today may be the Amateur's means of winning a contest or capturing some rare DX tomorrow.

—Norman G. Clarke, VK2 SWL.

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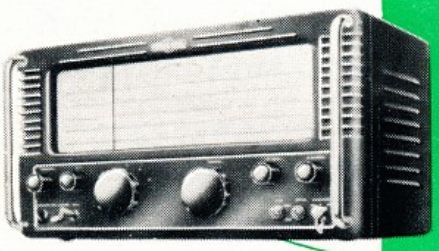

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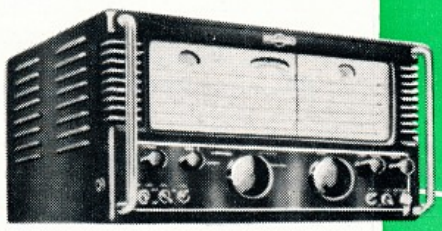

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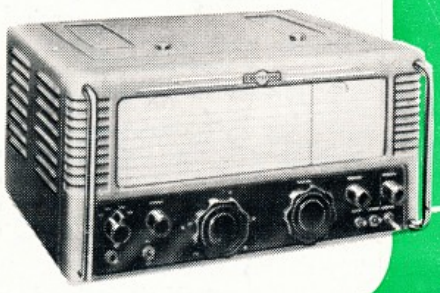

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